

SERIES PREFACE

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A Cultural History of Food presents an authoritative survey from ancient times to the present. This set of six volumes covers nearly 3,000 years of food and its physical, spiritual, social, and cultural dimensions. Volume editors and authors, representing different nationalities and cultural traditions, constitute the cutting edge in historical research on food and offer an overview of the field that reflects the state of the art of the discipline. While the volumes focus mostly on the West (Europe in its broadest sense and North America), they also draw in comparative material and each volume concludes with a brief final chapter on contemporaneous developments in food ideas and practices outside the West. These works will contribute to the expansion of the food history research in Asia, Africa, Oceania, and South America, which is already growing at an increasingly fast pace.

The six volumes, which follow the traditional approach to examining the past in Western cultures, divide the history of food as follows:

Volume 1: A Cultural History of Food in Antiquity (800 BCE–500 CE)

Volume 2: A Cultural History of Food in the Medieval Age (500–1300)

Volume 3: A Cultural History of Food in the Renaissance (1300–1600)

Volume 4: A Cultural History of Food in the Early Modern Age
(1600–1800)

Volume 5: A Cultural History of Food in the Age of Empire (1800–1900)

Volume 6: A Cultural History of Food in the Modern Age (1920–2000)

This periodization does not necessarily reflect the realities and the historical dynamics of non-Western regions, but the relevance of cultural and material exchanges among different civilizations in each period is emphasized.

Each volume discusses the same themes in its chapters:

1. *Food Production*. These chapters examine agriculture, husbandry, fishing, hunting, and foraging at any given period, considering the environmental impact of technological and social innovations, and the adaptation to the climate and environment changes.
2. *Food Systems*. These chapters explore the whole range of the transportation, distribution, marketing, advertising, and retailing of food, emphasizing trade, commerce, and the international routes that have crisscrossed the world since antiquity.
3. *Food Security, Safety, and Crises*. We cannot have a complete picture of the history of food without discussing how societies dealt with moments of crisis and disruption of food production and distribution, such as wars, famines, shortages, and epidemics. These essays reflect on the cultural, institutional, economic, and social ways of coping with such crises.
4. *Food and Politics*. These chapters focus on the political aspects of public food consumption: food aspects of public ceremonies and feasts, the impact on public life, regulations, controls, and taxation over food and alcohol production, exchange, and consumption.
5. *Eating Out*. The communal and public aspects of eating constitute the main focus of these essays. Authors consider hospitality for guests, at home and in public spaces (banquets and celebrations), and discuss public places to eat and drink in urban and rural environments, including street food, marketplaces, and fairs.
6. *Professional Cooking, Kitchens, and Service Work*. These chapters look at the various roles involved in food preparation outside the family nucleus: slaves, cooks, servants, waiters, *maitre d'hotel* etc., investigating also the most relevant cooking techniques, technologies, and tools for each period, giving special consideration to innovations.
7. *Family and Domesticity*. The acquisition, shopping and storage, preparation, consumption, and disposal of food in a domestic setting

are among the most important aspects of food culture. These chapters analyze family habits in different periods of time, paying particular attention to gender roles and the material culture of the domestic kitchen.

8. *Body and Soul*. These chapters examine fundamental material aspects such as nutritional patterns, food constituents, and food-related diseases. Furthermore, spiritual and cultural aspects of thinking about and consuming food are highlighted, including religion, philosophy, as well as health and diet theories.
9. *Food Representations*. These essays analyze cultural and discursive reflections about food, which not only contributed to the way people conceive of food, but also to the social and geographical diffusion of techniques and behavior.
10. *World Developments*. These brief chapters overview developments, dynamics, products, food-related behaviors, social structures, and concepts in cultural environments that often found themselves at the margins of Western modernity.

Rather than embracing the encyclopedic model, the authors apply a broad multidisciplinary framework to examine the production, distribution, and consumption of food, as grounded in the cultural experiences of the six historical periods. This structure allows readers to obtain a broad overview of a period by reading a volume, or to follow a theme through history by reading the relevant chapter in each volume.

Highly illustrated, the full six-volume set combines to present the most authoritative and comprehensive survey available on food through history.

Introduction

Locating Foodways in the Nineteenth Century

MARTIN BRUEGEL

The collection of hard data on the cost of living among laboring classes was the official reason why Lee Meriwether (1862–1966) found himself in Europe during an economic downturn in the mid-1880s. Sent there by the American Bureau of Labor Statistics, he held no brief against this task. He passionately believed that a Republican government and free trade would help to improve material well-being everywhere. The household budgets that he intended to collect would make his case incontrovertible. And yet, Meriwether doubted whether numbers culled from official statistics while staying in hotels recommended in Baedeker’s travel guides could do justice to the variety of experiences anywhere. They indubitably provided useful information and valuable perspectives on the ways in which people spent their income; however, they were incapable of conveying the values that informed people’s behavior and were insufficient to capture the full meaning that people attached to events, both extraordinary and routine, in their lives. Meriwether wanted to “penetrate below the surface” accessible by way of numerical surveys. “To know a country,” he declared, “one must fraternize with its people, must live with them, sympathize with them, win their confidence.” He thus resolved to walk through Europe—from Gibraltar to the

Bosporus, from the Mediterranean to the Baltic Sea—to see “something of low life.” By this, he meant the everyday lives of peasants, workers, and the occasional retailer.¹

Because food provisioning mattered so much to the people who Meriwether visited, and often accounted for more than two-thirds of their budgets, foodways consistently captured his attention. (This curiosity was much less in evidence twenty-five years later when he, then a forty-five-year-old lawyer, and his wife took an anniversary trip along some of the same routes in an automobile; according to Meriwether, speed impeded close observation, and already in 1887 he had recommended forgoing the bicycle because “the bicyclist might go faster, but he would see less.”) As a tramp abroad, Meriwether shared the ubiquitous rye bread that was the staff of life for most people whose “intimate acquaintance” he sought on his year-long backpacking tour. The young American discovered fried artichokes in Naples; yogurt and the varieties (but also the high cost) of drinking water in Constantinople; *Gemütlichkeit* and its relation to beer in southern Germany, where he appreciated the vegetables that workers cultivated in their own time in gardens provided by their employers; milk-cures for well-heeled tourists in Alpine Interlaken; the highly seasonal character of the Russian diet whose richness he much appreciated (“a glance at the bill of fare for dinner would disclose the exact month and season”); the by-then typical French three-course meal in a cheap—and precocious—self-service eatery in a Parisian bazaar; and vegetarian restaurants in London (“the economical traveller will do well to remember these”), where menus indicted the proper English meal in which meat was central. Certainly Meriwether’s encounters, more often than not, were fleeting. Yet he had an eye for the ordinary run of things. Breaking bread and engaging in table talk with a great many people of modest means from rural and urban, farm and industrial backgrounds, he came very close to embracing a posture akin to the ethnographic technique of participant observation. On the practical side, too, he proved something of a precursor. In the course of working up his field notes he put together a handbook for frugal travelling. He thus invented a subgenre among tourist guides that turned out to have a bright future.²

The young investigator was onto something when it came to the interpretation of material conditions and their development. He wondered about the relationship between wealth and happiness because he knew that

there was no straightforward way to define well-being. Not that questions concerning the reliability of statistical information worried Meriwether. He trusted their robustness. After all, vanguard Massachusetts had produced fine, large-scale budget surveys since the 1870s, perfecting earlier European studies.³ Such assurances completely eluded the French reporter and factory inspector Henri Louis Bourrillon (1876–1962). His involvement with data gathering led to the publication of a biting satire entitled *L'enquête* (1913) that detailed shortcomings in the process: biases in selection and attitudes, incompleteness, oversights, and especially involuntary and deliberate omissions. The book cast doubt on the usefulness of such records for an accurate appraisal of working-class lives. It left no ambiguity in terms of the political uses of data as evidence to justify efforts to reform the putatively profligate habits of laboring families.⁴ Meriwether shared neither qualms nor outlook. In the 1889 American companion volume to his European investigation, he expanded on a distinction between “cost of living” and “kind of living.” This was how the newly established U.S. Department of Labor meant to get a comprehensive grip on “the economic, social, and moral welfare of the people.” Budget parts, food quantities, and prices proved themselves to be pertinent tools when it came to assessing people’s capacity to satisfy their basic physiological and physical needs (food, housing, clothing) in a particular society. Such tangible data made historical and especially international comparisons possible. Yet Meriwether reckoned that the “cost of living” did not enable a complete interpretation of lived experience and human behavior. Hence his efforts to find out about social values and norms that shaped lives and helped organize society, and his interest in individual as well as collective manifestations of joy and sorrow.⁵

Meriwether’s intellectual challenge resulted from an embarrassment of riches. Before the nineteenth century there had never been such systematic drives to collect data in order to find patterns and regularities in human characteristics, conditions, and comportments. To be sure, the concomitant interpretation of two kinds of evidence—“hard,” objective facts and “soft,” subjective accounts—added complexity to his undertaking. And indeed, ever since, historians and social scientists relying on this legacy have grappled with, and often clashed over, the issue of translating quantifiable data (consumer baskets, wages, fertility, mortality, morbidity,

inequality, or crime) into assessments of the quality of life.⁶ The difficulty was real enough but it paled in the face of another, rather more surreptitious pitfall: the danger of describing unfamiliar societies according to American standards and of finding them lacking. Meriwether's attention to the social uses and appreciation of things reduced the risk. This perspective allowed him to consider each population on its own while remaining level-headed about its position when compared to other societies, their economic performance, and material achievements. It also kept him attuned to social inequalities. "Pedestrianism, [and] no other method of travel, will afford so clear and accurate a conception of the condition of a country's masses, of the millions who produce the wealth which the few enjoy."⁷

The observation of food and foodways lent itself well to such an integrated approach to the people's "kind of living." This multifaceted approach was path-breaking. It was an original accomplishment of the nineteenth century. The era saw the invention of intellectual tools and scientific methods that offered a new view of food consumption. For one, human nourishment emerged as an object of measurement with a quantitative vocabulary of nutrients, energy, and the supply of other life-sustaining elements now expressing its properties. Moreover, food appeared as a carrier of meanings that make up a culture, and so invited an examination in terms of signs and symbols that inform people's actions. Meriwether's curiosity and his eagerness to go native when it came to eating and drinking disabused him of some widely held Anglo-American beliefs. Was more necessarily better? Not so in Bulgaria, where he "walked twenty-five miles a day for days at a time, living the while entirely on black bread, grapes, figs and other fruit." This "simple and wholesome diet [enabled the American tramp] to stand the fatigue, and even to improve in health and vigor." His appreciation of meat notwithstanding, Meriwether arrived at an iconoclastic conclusion: "Lovers of roast-meat and juicy beefsteaks think hard work or active exercise cannot long continue on a bread-and-fruit diet. I think my pedestrian tour proves the contrary."⁸

While the young investigator held that free trade would improve material conditions, he also recognized that its impact on people's happiness was unclear. One of Meriwether's convictions, however, seemed indelible: the consumption of food and drink best occurred in a sociable environment. Part of the punishment meted out to prisoners in penitentiaries

from Brooklyn to Nuremberg and Lisbon consisted in having them eat in isolation. This was the degree zero of food consumption. Even a series of rich meals would fail to make up for the denial of company and conversation—the necessary ingredients of a full life. To deny them was, according to Meriwether, counterproductive: rather than providing inmates quiet time to reflect on their guilty ways and thus promote their reform, it was likely to induce melancholy, despair, and end in lunacy. Breaking bread—even if it was made of rye rather than wheat—helped institute humanity: whether on the roadside or a mountain top with itinerant artists or journeymen, on board an ocean steamer with fellow travelers, in a one-room, ground-floor apartment with a Neapolitan family, at the table of the Constantinople residence of a Syrian merchant, in the company of a “long-haired student” at the table of an eating house in Southern Russia, in a “cheap coffee-house” in Strasbourg, or in a “greasy spoon” in Frankfurt-on-the-Main.⁹

Meriwether’s narrative offers a fitting perspective on the relations of people to their nourishment in the nineteenth century. His *peregrinations*, which were far from commonplace even in a century that invented tourism (thanks to travel by railroad, which Meriwether used to get to Kiev), not only open doors on a variety of cultures and their foodways, but in fact reflect intellectual and practical preoccupations thoroughly rooted in the era’s increase in scientific projects to account for, explain, and perhaps master stability and change in nature and society. The following pages sketch this long century’s salient food features: they relate the invention of data to guide public actions and the transformation of the findings into historical sources; the elaboration of a quantitative framework to determine human physiological needs that combined with a hygienic impulse to improve living conditions (and eventually helped prolong life expectancy); and the effects of economic growth as well as the persistence of inequality and hunger. Taking the cue from young Meriwether, tangible developments in food expenses, caloric intakes, and innovations in food repertoires all figure in this thumbnail profile. However, the emphasis is on the categories through which contemporaries—peasants, workers, entrepreneurs, scientists, reporters, bureaucrats, politicians—construed their world, moved to change it, and interpreted the obstacles in their way in order to modify their environment. The combined attention to structural conditions and their interpretation by contemporaries is itself a legacy of the nineteenth century. Standard

research focuses on man either as a natural or as a social being. Here, the inquiry encompasses both aspects in an attempt to capture the ways in which culture mediated people's relationship to food between the French Revolution and World War I.

SOURCES

Modern statistics was born in the nineteenth century. System was the watchword when governments incorporated the use of large numbers to develop policy tools. Detailed empirical knowledge became a prerequisite for public policies. National states and cities created offices, supported agencies, and backed associations that devised scientific methods to generate and analyze information on population demographics, agricultural and industrial production, domestic and foreign trade, private and public revenues, housing, socially deviant practices (crime, drunkenness, prostitution), meteorology, disease, provisioning, and consumption. The list is incomplete, for anything that could be counted was likely to turn up in inquiries, surveys, and censuses. Today they serve as the archival stock of historical inquiries into the conditions and standards of living on the threshold of the contemporary era.¹⁰

A forceful promoter of quantitative research into so-called moral facts, the Belgian polymath Adolphe Quetelet (1796–1874) contended that correlations between, say, age or education and criminal acts, poverty and illness, occupation and birth or death rates, not only afforded a better description of society, but also sharpened the perception of the routes taken from cause to effect. The better grasp of social reality, Quetelet argued in the 1830s, put policies designed to “improve society” and to modify behavior on firmer ground. His relentless search for mathematical laws and normal distributions also led him to establish a correlation between human growth in height and gain in weight. “We find,” he observed, “that the normal [average] weight of adult individuals is proportional to the square of height [in meters].” Fifty years later, the German statistician Ernst Engel (1821–1896) held that Quetelet's discovery was extremely useful because a deviation from the correlation was a good predictor of ill-health or physical weakness. This revolutionary insight languished for three generations but then enjoyed a forceful come-back in the 1970s. Baptized as the body

mass index, it now generally serves as the medical standard to define normal weight and obesity, and in epidemiological studies it suggests a link between excess weight and ailments of various kinds (cardiovascular disease, diabetes, kidney trouble, cancer, and so on).¹¹

The boundless appetite for observable facts notwithstanding, the resources required in collecting quantitative data were not spent *harum-scarum*. Industrial development generated worry about its effect on industrial workers and on their living conditions, moving it onto the public agenda. Concerns over poverty propelled inquiries into working families who dwelt in overcrowded quarters and lived on scanty food supplies that exacerbated the odds of their falling victim to epidemics and other afflictions. To learn just how they spent their incomes—and what they received in terms of food, clothing, habitat, and health care—was the purpose of household surveys, first conducted privately in late-eighteenth-century England, and then vigorously and administratively on the continent by the mid-nineteenth century. By then, statistics was on the way to becoming a *lingua franca*; its practitioners united in an intellectual community spanning the Atlantic to the Ural. From within this vibrant environment, Ernst Engel formulated one of the very few “laws” obtained within the social sciences. Calculating averages on the Belgian data coming from 199 working-class household budgets collected under the supervision of Edouard Ducpétiaux (1804–1868), Engel stated that “the poorer a family, the greater the proportion of the total outlay devoted to the purchase of food...and furthermore, other things being equal, the proportion of the outlay spent on food is an altogether unmistakable measure of a population’s material standard of living.” The statement has kept researchers busy since the late 1850s.¹²

Engel’s generalization relied on mean expenditures and mean revenues. It promoted research in economics where the mathematically formalized relationship between size of income and budget share, and its theoretical explanation, continues to this day, reflecting on data from Ducpétiaux’s original budget series and linking the findings to contemporary surveys on consumer demand. Yet aggregation often hides as much as it reveals. Identical incomes often yield variable (heterogeneous) consumption patterns. Economists agree that variables beyond revenues and prices influence the ways in which people spend their money.¹³ The cautious conclusion

by no means implies that irrationality, impulse, and idiosyncrasy guide spending. It does, however, shift the burden of explanation to other social sciences. And indeed, the analysis of 482 German household budgets selected from surveys conducted on the cost of labor by the Imperial Office of Statistics in 1907 and by the Metal Workers Union in 1909 led the French sociologist, Maurice Halbwachs (1877–1945), to assert the social, rather than the economic determination of expenditures. Equal revenues generated different budget allocations among blue- and white-collar workers. Social classes, he concluded, lived by their own definitions of needs. This finding, too, sent scores of researchers looking for the motives that drive consumption practices. Halbwachs's thesis is not without issues. It perpetuates the *sempiternal* notion that the satisfaction of primary biological requirements among the popular classes precedes the development of secondary (high) spiritual wants, which are thought to characterize the upper echelons of society. That cultural factors—custom and taste, and the symbolic meaning of goods—affect consumer spending as much as, if not more than, the satisfaction of material or spiritual wants was the point made at the end of the nineteenth century by the American social critic Thorstein Veblen (1857–1929). He pinpointed invidious distinction as the motive of conspicuous—and hence wasteful, economically inefficient—consumption, rather more so in, but not limited to the leisure class.¹⁴

Factual investigation did not stop with the accumulation of numbers, their mathematical analysis, their representation in graphs and tables, and their discussion in the media and legislatures. *Dry* statistics required a narrative to relate the context in which the observed population evolved, so the peripatetic Meriwether thought. His attempt to recover first-hand accounts from the people whose conditions he set out to depict situated him in an almost century-long line of social investigators. They, too, invented themselves in reaction to the Industrial Revolution and directed their searchlight on the poor, the factory, and the city. They, too, sought to describe social conditions in quantitative and qualitative terms. At times, theirs was a parliamentary or scientific mission, at other times print media or philanthropic associations hired them, and sometimes—as in the case of Friederich Engels (1820–1895), reporting from the industrial cauldron that was Manchester in the early 1840s—they worked on their own. Physicians such as Louis-René

Villermé (1782–1863), a member of the French *Académie des sciences morales et politiques* and a friend of Quetelet's, with whom he happened to share a keenness for numbers, “examined the effects of the textile industry on those it employs [in France and Switzerland], investigated wretchedness without humiliating the wretched, observed depravity without irritating the depraved” in the 1830s. He followed workers into factories and homes, sat down for meals with them, joined the men in pubs, and with the wives' help, poured over their household accounts (if any). In doing so, he learned about “their joys and complaints, disappointments and hopes, vices and virtues.” In England, the journalist Henry Mayhew (1812–1887) built his monumental work of portraits of *London Labour and the London Poor*, collected in four volumes in the early 1860s, on the same procedure: direct observation and communication. Mayhew took special pains to emphasize that this was “the history of a people, from the lips of the people themselves—giving a literal description of their labour, their earnings, their trials and their sufferings, in their own ‘unvarnished’ language.” Whatever the partiality—soft spots or jaundiced eyes, miserabilism or populism—among the social investigators who compiled such records, these were attempts to retrieve usually unheard voices from the lower classes and ignored views from the inside.¹⁵

Statistical surveys and investigative reporting detailed conditions and experience: agency inasmuch escaped them as witnesses filtered their offerings. The growth of literacy and numeracy expanded the number of actors who wrote down their lives or kept archives of their activities. It eased the paucity of sources relating particular experiences from an original perspective. Novel organizations and institutions on the rise contributed to the diffusion of the printed word as applied to food production, provisioning, and preparation. Consumer cooperatives—and their annual reports—thus provide data on self-help and the changing acceptance of a decent alimentary supply in the nineteenth century. Restaurants and collective eating places—and their menus—disclose proper meals and hierarchies among consumers. Cookbooks relate the tensions between culinary standardization and innovation, the modernizing or conservative impulse of cuisines in politics or technology, the ideas on the education of homemakers, and the management of households (the rationalization of which would, of course, facilitate budgetary surveys).¹⁶

On the individual level, autobiographies, diaries, as well as personal correspondence allow for the observation of everyday life. These are difficult sources to exploit: retrovision likely colored recollections. And yet, the very partiality conveys clues as to the motives that drove the actors. Historical narratives gain texture from such particular documents. At their best, first-hand records show how things got done and what they meant. There is, however, more at stake. The combination of direct evidence with structural data is a step toward the reconstruction of people's possible conduct. The integration of quantitative and qualitative evidence results in the retrieval of the past and how it *essentially* was: it proposes a depiction of historical constraints and their perception by different protagonists who acted upon them. It provides a dynamic account of people's choices. Their routines, adherence to conventions, and sprees into opportunistic behavior are then best construed as strategies to get a grip on everyday life—in the present, as well as in the near and distant future. In short, historical contingency and the bandwidth of choice identify individuals, families, groups, or social classes by way of their objective situation and their specific behavioral pattern. The combination of different types of evidence and various points of view helps to uncover the general principles governing the social and cultural world on a particular scale: the personal, the familial, the neighborhood—up to the institutional, and long-distance world that the protagonists inhabited.¹⁷

The understanding of the culture of food in the long nineteenth century gets a boost from the abundance of statistical data and first-hand observations. The data enable inquiries into provisioning and consumption that highlight the ways in which people navigated between chore and choice when encountering supply. Such analyses show that the consumer who used foods to fashion a lifestyle and to create an identity was still a far-distant type. Indeed, anxiety continued to burden the relationship of many to their sustenance. As late as 1900, the children of London's working class still learned to live with hunger, residents of the French countryside were still confronted with chronic malnutrition, and protracted periods on empty stomachs were still endemic among workers and their households in Saint-Petersburg. Penury imposed thrift as a way of life. As if to cheat hunger at least once in a while, feasts had long punctuated lean existences: on religious holidays, upon completing a job where many hands joined

together (harvesting, for example), on an exceptional civic occasion (coronations, elections), during yearly trade or agricultural fairs. They continued to do so in the nineteenth century.¹⁸

Necessity also propelled invention. When the price of fat geese dropped, poor Parisians were poised to grease their knives. That was the topical expression in France: fat was indeed the limiting element in many a diet. Most remarkable indeed is the savvy with which poor people sought food-stuffs and established relationships to maintain their efforts; the affluent had their own circuits of provisioning. Poor and rich did so within and without the market. Old and sometimes new wealth drew foods from their landed estates. The food economy of the poor family engaged all the members (just as revenues came from husband, wife, and offspring): children scavenged for leftovers in front of military barracks (as they did in Basel) or on markets at the end of the day (as happened most everywhere); wives and daughters received comestible extras from their bourgeois employers (via their cooks), or picked up stale bread from the baker's outlet, and limp vegetables from the greengrocer's stand on their way home; and fathers and sons fetched a bite—fish and chips, fried potatoes, smoked eel, a ham sandwich, a pizza, a piece of cake?—on the run to, or back from work. In fact, there were secondary—or used-food—markets for most anything in major cities from London to Paris and Naples: edible oils, coffee grounds, tea leaves, left-over meat and fish, the latter either hot or cold. The mobilization of these sources makes everyday culture come to light in the allocation of the food budget and the deployment of social skills to assure the food supply and to organize its consumption. The study of food and foodways thus becomes a means to explain the ways in which societies reproduced themselves.¹⁹

MEASURES

The quantitative groundswell effected a turnabout in the scientific approach to human nourishment as well. Justus von Liebig (1803–1873), one of the activists promoting the new method, caught the paradigmatic shift in a few lines. Before, “medicine, following the model of Aristotelian philosophy, has formed [abstract] conceptions of nutrition and the formation of blood; it classified comestibles into nutritious and non-nutritious; but these

theories, based on observations made under conditions that ignored the requirements necessary to arrive at just [testifiable] conclusions, could not describe real processes.” It took the application of “the quantitative method in organic chemistry to see [and understand], in all clarity, the relations between foodstuffs and the purposes they serve in the living body.” While clarity would not be obtained for some decades, by the 1840s a community of researchers had identified the components of foodstuffs. In a momentous article published in 1827, the English physician and chemist William Prout (1785–1850) divided alimentary principles into *saccharinous* (carbohydrates), *oleaginous* (fats), and *albuminous* (proteins). The invention of an original language based on pioneering investigations conducted in newly established laboratories was but one, albeit crucial and long-lasting contribution of organic chemistry to the study of animal and human metabolisms. It also elaborated a research program that pretty much remains intact today. The chemical characterization of individual foodstuffs made up one axis, their assimilation into—and disposal from—the body formed a second area of investigation, and the measurement of nutriment intake and output was another.²⁰

It was the third vector of research that would resonate most forcefully beyond the laboratory walls in the nineteenth—and into the twenty-first—centuries. Nutritional knowledge appeared to be a propitious path to better health and increased labor power, and the drive to acquire it fired up medical and physiological studies of men’s macronutrient needs. In turn, the mediatization of dismal living conditions and the capacity to formulate potential improvements offered a forceful argument for their pursuit, leading to the rise of chemical physiology’s academic standing. Empirical ration scales had, of course, long existed. Hospitals, poor-relief institutions, monasteries, but especially the army, the navy, and prisons parceled out food in order to keep their clientele going in the worst case, and active and alert in the best. By the 1840s, tradition and empiricism gave way to systematic observation and controlled experiments, the result of which aimed at influencing public policies, commercial ventures, and individual behavior. Scholars developed complex methods to quantify macronutrient ingestion and excretion of able-bodied men (railway workers, peasants, soldiers) in order to determine their need for nourishment when active, resting, or merely surviving over a precise period of time. It fell to the

Dutch physician Jacob Moleschott (1822–1893) to compile the results of twenty-one dietary studies and derive an average man's needs by subtracting excretions from intakes. The resulting numbers, published in 1859, set the daily consumption of proteins at 4.5 ounces, that of carbohydrates at 14 ounces, and fats at 3 ounces for the average man, whose weight of roughly 140 pounds came directly from Quetelet's work. (Moleschott could not yet know because the scientific tools were lacking at that point in time, but his macronutrients added up to approximately 3,000 kilocalories.) This summary does not do justice to the skill required, and hypotheses formulated in order to do such calculations. Our more sedentary mode of living as well as methodological modifications have led to a reduction of the officially suggested macronutrient contribution to the diet of a healthy adult. But the fact holds: Moleschott's computations inaugurated the era of quantitative nutritional recommendations.²¹

They certainly had an impact. Liebig's prestige and voluntarism led pioneer physiologists to emphasize the role of protein (from the Greek *protos*, meaning *first*) as the main building block of muscle tissue and exclusive provider of energy to animals and humans. Adherence to balanced diets did not prevent chemical physiology from exalting meat—animal protein—at the expense of other foods. The high recommended intake of protein and its actual presence in the dominantly plant-based diets of poorer households did the rest: the discrepancy exposed an overwhelming protein deficit. Closing this gap appeared to be one solution to the so-called social question; all the more so, as good food appeared as a rampart against the consumption of alcohol. The hope for changing the living conditions of the European population for the better inspired researchers. The prospect of financial profits revealed entrepreneurial acumen and motivated industrial ventures. Liebig himself devised a method to extract and condense meat juices whose benefits to human health and strength he asserted. The enormous cattle herds in South America and Australia supplied the raw material for his branded meat extract, a commercially successful application of an erroneous scientific theory. Others followed suit, for this was “a remunerative trade” and “a remarkable page in economical history” in the words of the *Food Journal* in the early 1870s. Hospitals and the military were early clients of the new product, and there individuals acquired the taste for it before private consumption took off in middle-class households intent on

saving time rather than money. This was global business. The New World fulfilled an ancient European dream: it provided meat, albeit first as a condiment rather than a food. It took traditional salting and modern canning and refrigeration to supply European markets with large quantities of the real stuff somewhat later in the century.²²

The scientific doctrine of the priority of animal protein was swiftly overthrown. The growth of meat consumption, however, remained a top priority, if not always for governments, at least for philanthropists, politicians of a reformist bent, and among food experts. Other foods of animal origin profited from this hierarchy: as butchers' meat remained at a price that precluded its regular consumption in working-class families in Europe, lobbies and professional authorities promoted substitutes such as fish (in Great Britain and Germany), or dairy products and eggs (in France and Switzerland, for example). In brief, average meat consumption per head continued to serve as a measure of economic development. It indicated the standard of living. As a cliché from which his usual sagacity did not save the Italian economist and politician Francesco Nitti (1868–1953), diets rich in animal protein were supposed to explain the reason why “a few tens of thousands of well-fed English carnivores hold in subjection a hundred million of Hindus [living as vegetarians on a plant-based diet].”²³

Physiological inquiries in the second half of the nineteenth century turned toward studying energy metabolism. Macronutrient, and especially protein needs remained a focus of study and (at times, acrimonious) debate, but attention shifted to the amounts of power that food delivered. New metaphors accompanied the change in perspective. Food became fuel—the body emerged as a motor. In this era of rising industrial capitalism, efficiency soon became the motto of studies on the ways and ratios in which muscles transformed food intake into physical output. Calories became the unit of measurement. They made possible the calculation of the cost of human productivity. If knowledge of physiological processes motivated researchers such as Wilbur Atwater (1844–1907) and Max Rubner (1854–1932), they added two more vectors to their scientific activities. For one, they turned to “the pecuniary economy of food” (to use the title of an 1888 article by Atwater in the magazine *The Century* that took as its hook an anecdote on American food practices culled from Lee Meriwether's reporting). The combination of nutrition and economics was to consider “the

relation of the nutritive value of food to its cost.” Empirical budget studies appeared to prove that poor households spent their money unwisely; according to these “students of social economy,” reallocation between foods—from meat to legumes or pasta, for example—would augment the healthfulness of a diet, save money, and incidentally stave off the temptations of alcohol. In short, the program aimed at the rationalization of common, wage-earning people’s conventional diet; wealthy households, who elevated conspicuous waste to a lifestyle, eluded reform (at least until World War I). If *grande cuisine* and gastronomy had meant the emancipation of food from medicine, rational eating strapped them up again with the ties of utility.²⁴

Such modification of daily practices required the spread of scientific information, and many a physiologist joined a pedagogical vector and a social engagement to his or her professional duties as a lever with which to inflect alimentary habits. They wrote articles in widely distributed magazines, rode the public-lecture circuit, and participated in associations for the promotion of rational eating. Since women ideally ran household provisioning and nurtured family members, they were the main target of the diffusion of the new knowledge. To be sure, they were certainly beneficiaries of this, but victims, too: for the advice conveyed new standards to live up to. Nutritional recommendations came as part of a package to reform modes of living. It concerned cleanliness, physical activity and, obviously, household management that included such virtues as foresight and saving, personal hygiene, and temperance. All of them required investments. One handbook urged households to buy “a balance and a clock” to implement new behavior. Change came slowly, however, as food habits resisted injunction. The burden of the new and more intensive domestic chores fell disproportionately on women. Accordingly, they bore the brunt of criticism when reformers sought the culprit for the failure of putting information into practice. Thus, the American businessman and moral reformer Edward Atkinson (1827–1905), who had invented a fuel-efficient stove for cooking, concluded in the early 1890s that his “own mission appears to be to overcome the inertia of woman; a very hard piece of work.”²⁵

By the end of the nineteenth century, scholarly studies of the processes involved in the maintenance of human life had ostensibly dispensed with Galienian, Hippocratic dietetics. It had also linked human and animal

physiology: the study of feeding standards for livestock proceeded at the same time. Still, theoretical reasoning and empirical proofs did not sway the establishment instantly. Moleschott himself relied on the temperaments to explain metabolic differences and to recommend certain foods to regulate digestion and balance character: he still believed that fiery wines, coffee and tea profited melancholy people. University textbooks and up-to-date manuals, at least in France, sometimes fell back on humoral language. They continued to advise sanguinary temperaments to eat mild and refreshing food (fresh fruit and vegetables, *avant tout*), whereas phlegmatics required stimulating comestibles (red meat). Overall, however, research progressed within the newly established framework: scholarly disputes revolved around the values, but not the existence of substantial and caloric needs.²⁶

Beyond laboratory walls, scientific journals, advice books, and middle-brow magazines the new nutrition ran into difficulties in inflecting foodways. “Habit,” the already quoted reformer Atkinson noted, was at the root of the “lack of appreciation of the importance of a reform.” Inherited beliefs that beans were bad for children persisted and curbed the recommended increase in the consumption of protein-rich legumes in lieu of meat. Among the French working class, the use of the easily digested sugar as an energy-laden food stumbled over its image as a futile condiment “good for the bourgeois” when nutritionists promoted it around 1900 as a way to increase calorie intake, especially among men (the decline in its price was to sustain the growth of its average consumption). The English working class remained suspicious of fruit, vegetables, and milk. In the United States, fresh milk was yet to become “nature’s perfect food,” too—a competitor of the increase in carbonated-soda sales.²⁷

If attitudes and beliefs interfered with nutritional messages, perhaps the toughest resistance to the new way of describing and classifying foodstuffs came from long-established, religious nomenclatures. Their precepts had found their way into daily routines; as everyday practices, they asserted (and marked) identities. The encounter of two classifications of food could be reinforcing. In Germany, conservative Jewish authorities found much support for the traditional dietary laws in physiology. Science, rather than making tradition obsolete, sustained its claims to health benefits and sanitary accomplishments. Things could go the other way round, of course, and modernizing Jews used nutrition to argue against what seemed to be

irrational rules with baleful effects on health. In Catholic France, the religious heritage identified foods according to principles whose incompatibility with the new scientific understanding seems obvious now, but took time to settle on commentators then. *Meager* was one such category. If it still designated *Lenten* foods for Catholics, it came as *low fat* in nutritional terms. The difference is significant, its impact on nutritional recommendations patent. “It is well known that ‘meager foods’ include milk, cheese, cream, and eggs,” a popular French magazine wrote in 1905. It extolled their nutritional and culinary virtues, especially when it came to feeding children. The combination of dairy products and legumes (nevertheless accompanied by half a pint of beer or wine per meal for an adult man), it further insisted, “fully satisfies the needs of the human body.” The rise of the average body mass index in many a developed country in the late twentieth century would have this advice sit ill with the guardians of public health who were concerned with calories and cholesterol. Secularization pre-empted the confrontation.²⁸

DEVELOPMENTS

Was the parallel existence of different food nomenclatures a moot concern around 1900 when malnourishment remained a widespread affliction in Europe and, to some extent, the United States? Maybe so. As a matter of fact, even a cursory look at advertising in the years before the Great War unveils an altogether more pervasive preoccupation with fatigue, its immediate relation to productivity and accidents, and its longer-term link with tuberculosis. Anything to overcome neurasthenia appeared worthy of attention. This was the era when all kinds of kola products hit the market as tonics. In France, the African kola nut’s active principle—caffeine—could be obtained in the form of pills at drugstores or as powder to prepare a hot drink (comparable to chocolate) at the grocer’s. In the first instance, it was used to help sportsmen maintain their form, in the second it whipped up energy at breakfast or helped restore “force and vigor” in the afternoon. As a carbonated, tickling energizer of the body and the brain, a concoction of extracts from cocaine leaves and kola nuts started its rise to world prominence in the 1880s at one Dr Pemberton’s (1831–1888) apothecary’s counter in Georgia, in the United States; marketed first as patent medicine, it

quickly morphed into a soft drink (minus cocaine, the story has it). Sobriety developed into a personal asset in this age of industrial growth and moral reform. Though lacking soda's refreshing potency, coffee's stimulating effect sustained its increasing importance in private and public consumption: in Germany, its per capita consumption tripled from 1.7 to 5 pounds between 1850 and 1900. The focus on exhaustion resulted, at least in part, from an optical effect. The European science of labor focused its attention on the rapport between energy balance and fatigue. However, everyday experience had something to do with marketing spotlighting the benefits of stimulants. After all, longer factory and business hours meant that the intensity of work increased apace. Such new physical claims on people in the labor market needed to be met. Caffeine—or quinine or nicotine—provided some necessary jolts. Nourishment, however, provided the most consequential part.²⁹

Food supply increased tremendously in the nineteenth century. Average food consumption took off spectacularly after centuries of stagnation (only alleviated in periods of drastic demographic losses). Everything changed; this was an era of a distinct break with the past. In France, mean daily intake per person grew from about 1,900 to 3,000 kilocalories between 1800 and 1900. The point of departure was slightly higher in England, with approximately 2,400 kilocalories, but it too reached 3,000 kilocalories on the eve of World War I. The volume grew, and every foodstuff contributed to the momentous step that moved these countries from the barely adequate level of diet *on average* to sufficient calorie availability. Benefitting from agricultural improvements and existing distribution circuits, the caloric contribution of cereals augmented while its part declined as a consequence of the growing importance of potatoes, meat, dairy, vegetables, fruit, fish, and sugar. Of course, the diet was more industrial in urbanized England than in still predominantly rural France: on average, groceries (such as marmalade or margarine, or even tins and exotic fruit such as pineapple) weighed in more heavily in England, whose foodstuff importations from overseas had vastly expanded with the coming of steamships and railroads.³⁰

Change moved more than mere volumes. It modified the diet's nutritional makeup. Something of a pattern emerges from other countries' very similar, if later historical experiences. The mounting number of carbohydrates brought a switch to more prestigious, more easily panified cereals. In

Belgium, rye bread gave way to loaves containing ever more wheat in the nineteenth century. The same phenomenon had taken place earlier in Paris, but was noticeable in rural France at the same time. There, barley and oats had given way to rye, and then to a mixture of rye and wheat. This bread got whiter as industrial milling progressed. The British, too, manifested their preference for white bread. Not that there was an economic or nutritional gain in this development. Taste surely played a role. But so did the symbol. White bread, whose material importance actually diminished with time, appears as a sure sign of a society that put nature's fetters at a distance, a society that was capable of removing hitherto essential natural resources from its food supply.³¹

Then there was the threshold of 3,000 kilocalories per day and per person. As availability got nearer to this level, animal products began substituting for plants. The tremendous growth of sugar in the average diet—it furnished one-sixth of the calories consumed by the English at the beginning of the twentieth century—hardly mattered in this modification: carbohydrates (from cereals and potatoes) yielded part of their share to fats, and animal proteins equaled, then supplanted proteins of vegetable origin. Many different places in Europe replicated this development. The structural transformation became known as the nutritional transition. The move from a plant-based to a meat-based diet was a tremendous achievement, and it effected a better absorption of nutrients that, in turn, improved health. Seven plant-based calories produce one meat calorie, and in nineteenth-century Europe the substitution was made possible by goods coming from overseas. This is emphatically not the same as the otherwise momentous domestication of American plants in Europe (whose crucial contribution to the gamut of foods and well-being is only overshadowed by the Irish Potato Famine of 1845–1848, whose notoriety eclipses later peacetime famines resulting from the crop failures in Finland of 1866–1867, and regional occurrences in Russia twenty-five years later). Granting the Old World a long-held wish, the new diet turned into a model elsewhere, with various degrees of success—as the twentieth century would show. It also set the stage for the increasing anxiety over the effects of such a rich nutritional regime—from cardiovascular disease, to obesity and diabetes.³²

While the pattern of the nutritional transition is clear, the rhythm of the remarkable development remains a controversial issue—and one that has

engaged historians in an abrasive dispute, first in England, and later, to a lesser extent, in other locales where economic output increased. As interpretations stand now, it does seem that the generations who lived through the onset of modern economic growth may well have paid a physical price for it. Not only did average height decrease in Europe and North America before about 1860, poor nutrition in childhood and adolescence, as well as residence in more crowded, urban spaces appear to have taken their toll on individual health when reaching a mature age. People were shorter and sicker on average, but the distribution of the burden was unequal. The increasing disparity in physical height denotes the exacerbation of social differences: upper-class men were taller than those coming from the working class. Higher incomes bought better nutrition. That observation applied to nations, too. Meriwether noted that a six-foot-tall Frenchman was a curiosity, and indeed, on average, American and English men were taller than their continental counterparts.³³

The second half of the nineteenth century brings with it less historiographic controversy. Stable or lower relative food prices contributed to improvements in the physical well-being of the lower classes. Inequality persisted, however. From a nutritional point of view, rural dwellers were usually worse off than urban residents (though urban living came with other risks that shortened life). Rural provisioning bore the mark of an economy of expenditures. The imperative prompted families to produce as much for themselves as they could in order to keep cash expenses to a minimum. However, self-sufficiency was not the ideal; rather, surplus production stimulated exchange and generated the income with which to buy indispensable goods (salt, sugar, and so on), services (medical care, lawyers, and notaries), and pay taxes. When women ran the dairy and raised poultry, commercial motives and self-supply went hand in hand; such income may even have added to women's say within the family and weighed in on spending decisions. And still, ever more intense relations with cities kindled ill feelings among the peasantry in France. A glum mood may have informed peasant-writer Émile Guillaumin (1873–1951) when describing the hardships of life in the countryside. He noted that the finest farm products—white flour, beef, fine ham, vegetables, and fruits—went to the city market: “to us the pain, to them the gain.” Farm meals remained monotonous: rye bread, onion soup, potato soup, pumpkin soup,

and beans. Meat appeared on holidays, and during harvesting rancid lard fortified the soup. Wine remained an urban beverage, consumed only at festivals in rural areas. In the English countryside, too, potatoes came in as the second food item after bread; the stereotype about English beefeaters notwithstanding, meat remained a luxury among families of farm hands and other low-paid workers residing in rural areas. Social investigators noted that provisioning hardly ever met Atwater standards (3,500 kcal and 4.5 oz of protein per person and per day), and that underfeeding remained a rule in rural England.³⁴

In cities, next to palaces of high living where French gastronomy held sway and whose leftovers supplied secondary food markets, usually survived a population living on scraps—and charity. Meriwether, for whom London was the modern Babylon where “there is so much wealth on the one hand and poverty on the other,” thought that philanthropy allowed many a working poor to exist; “existing,” he emphasized, “for he does not *live*.” Poverty *perdured*. Wages, even when rising, often proved insufficient to pay for the satisfaction of basic needs; that is, to assure physical efficiency. “How do Dutch workmen and their families manage to live on these small incomes in such an expensive place?” the American consul in Amsterdam wondered in the early 1870s. “In reply,” he went on, “I must in the first place explain that to the industrial classes in Holland, animal food, cheese, eggs, beer, currants, raisins, sugar, &c., are luxuries of which they partake only on Sundays, and then but sparingly, and in some instances not at all. They live chiefly on potatoes, cheap vegetables, such as carrots, turnips, onions, cabbage &c., stewed with lard, and bread, both wheat and rye. When cheap vegetables are not procurable, they vary their meal by dried peas and beans of various kinds, or rice, barley, and flour, prepared with butter milk and treacle.” There had surely been an increase in variety since 1800. But did it meet the requirements to get through a ten-hour work day?³⁵

The trend toward an average supply of 3,000 kilocalories per person by 1900 failed to reach contemporary recommendations (today, it stands at 3,300 kcal for eight working hours). Children, of course, need less, and so adults receive more. However, food distribution within the family was geared toward the father. Sons, too, benefitted. Since supply was limited, mothers and daughters received the smaller part, and went less nourished.

The justification for this nutritional imbalance relied on the fuel argument: the main breadwinner required most energy, and so had a right to the best foods. Self-denial came with the mother's position. Its consequences on possible pregnancies remained an overlooked issue (although Moleschott quite clearly noted the increased need for nutrients among pregnant and breast-feeding women). There was, in effect, more to this mechanism. Meat's top rank in the hierarchy of foodstuffs corresponded to the status of the *pater* at the apex of the family pyramid. The physiological and the symbolic, culturally determined attributes of meat as a provider of strength reinforced each other perfectly. Access to food literally signified the pecking order.³⁶

CONCLUSION: MODERN TIMES

Agricultural innovation and industrial development pushed economic growth in the nineteenth century. Material well-being improved in Europe and North America. The pace was uneven, the gains were unequal. Real income did not rise in the same proportion for everyone, and some groups became worse off before their circumstances improved. Social struggles to receive a more equitable part in the fruits of economic development marked the era. The overall trend, however, was there, if not unmistakably so: contemporaries—and the burgeoning statisticians studying mortality rates—may not have noticed, but by 1800 England and France stood at the brink of an increase in life expectancy that continued up through the twentieth century and would sweep along other nations, too. By 1900, an English newborn could expect to live 48 years, up from 36 a century before; a French baby's life expectancy had risen from 33 to 46 years over the same period. A new era had begun.³⁷

The growing food supply as well as the surveillance of its quality, contributed to this gain. When, in 1820, a whistle blew in London, it was heard around the world, insuring that food quality became an ever-more salient public concern. The cause for alarm originated in the danger that the goods available in the town's markets presented for consumers. No article seemed to escape the cry of indignation. The author of *A Treatise on Adulterations of Food and Culinary Poisons* was a German chemist. Frederick Accum (1769–1838), though abreast of the most recent advances

in theoretical chemistry, cultivated a very practical outlook. He had previously made crucial contributions to the introduction of gaslight to cities, and continued to devote his energy to improve his contemporaries' quality of life thereafter. To be sure, this was not the first time that a city's food supply was the subject of a ghastly and detailed description. Pre-revolutionary Paris emerged under a rather sinister aspect when the roving chronicler Louis-Sébastien Mercier (1740–1812) described its food markets, as well as its water supplies (drawn from fountains and the increasingly polluted Seine) and deficient sewage system. The darker corners of the city of light held tainted bread, fetid meat, spoiled fish, and soiled vegetables. Circumstances were no different in Vienna, Madrid, and in larger, ever-more crowded cities elsewhere. Cologne's streets struck poet Bayard Taylor (1825–1878) as particularly dirty in the 1840s, and he only repeated the critical, if humorous stance on the city's stench that Samuel Taylor Coleridge (1772–1834) had composed in 1828. There is, however, good evidence that the remarkable attention to bodily hygiene elevated the achievements of public health in Japan to levels then unknown in Europe. Accum had arrived at his appalling conclusion by using the methods of chemical analysis rather than the use of sensory capabilities; that is, of view, touch, smell, and taste. That was a paradigmatic break with the past. Henceforth, scientists and scientific expertise would claim—or be pushed into—a part to play in regulating food markets.³⁸

Experts thrive on norms, of course, and normalization is what happened when food became an object of scientific analysis. The new understanding of foodstuffs promoted research. It also fashioned a public discourse on how to behave. The efficiency by which new industries, forms of transport, and wire communication distinguished themselves, was reflected in the recommendations on what to eat and drink. Everything seemed to speed up. Lee Meriwether, a fine observer, mentioned “another thing that lends to Milan an appearance of the nineteenth century is the fact that the people are in a hurry. I don't mean, of course, an American hurry, but an Italian hurry.” Foodways, however, changed at a more leisurely pace, building on traditional tastes and inclinations. After all, people eat culturally consecrated foods, not nutrients advocated by health reformers. Some routines appeared perennial. One is the habit of eating on the run and in the street. Meriwether marveled at (his spelling) “the marruzzara, the carnacatotaro,

the pizzaiuolo (shellfish, cooked meats, and cake sellers)...who ply their trades in the street, in the open air" in Italian cities. This was an inclination that was open to innovation: after all, fish and chips became an English working-class staple with the growth of trawl fishing and the spread of railroad networks.³⁹

Such continuity should not conceal the impact of the great transformation that began in the nineteenth century. Consumer baskets were not only larger in 1910, their composition was richer. Again, disposable incomes varied, and with them the extent of choice. For some, this meant merely more potatoes on the plate (all other things being equal); for others, an additional cut of sausage. The better-off managed to buy time-saving convenience foods, packaged and branded. Soups, sauces and tins, jellies, pasta, corn flakes, condensed milk, margarine, baking powder, and baby formula could be stashed away in the larder, required little more than heating as preparation, and were easy to consume. Mass-produced biscuits began to accompany tea and coffee. Exotic fruits from bananas to pineapples graced some tables. Many of these goods made timid appearances in modest households. But the "extension of consumption" was a fact "as remarkable as the transformation of transport and communication networks," an observer of Paris in the 1890s noted; he boldly asserted that "we now live under the regime of universal consumption." Entrepreneurs anticipated growing business. Just as the techniques of consumption were updated, commerce modernized its sales strategies and invented quasi architectural designs to display new goods (canned preserves being a favorite). In Milan, Meriwether noted "big shops with large windows, and goods tastefully exhibited therein—a thing unknown in the southern Italian cities where the smallness of the business shops is astonishing." Increasing supplies required means with which to stimulate consumer spending.⁴⁰

There is another aspect to this makeover of the food repertoire. Most of the new, industrially produced articles, including American pork sausages, were evidence of the spatial integration of the food economy: much merchandise hailed from afar. Africa, North and South America, Asia, and Australia sent their foodstuffs—from wheat to rice, from fruit and vegetables to coffee and tea, and meat—to Europe. Goods (and information and people) now moved faster and farther. Awareness of that momentous change came early in England where industrialization, urbanization, and

the building of an empire had altered modes of living before their effects modified lives in continental Europe. By 1873, the *Food Journal* noted that “the world is ransacked for delicacies; the kitchens of the East and the West, of the North and the South, are open to all mankind; we cover our tables with rarities from every country from India to the Pole, we grow our meat, our fruits, and our wines on one side of the world and eat them on the other; we have arrived almost at the perfect world wide communism in the matter of food.” The English seemed none the happier for it; the *Food Journal* concluded that “we are not content” in spite (or perhaps because) of the new abundance and its commercial display.⁴¹

The benefits of such trade were often lopsided, its consequences on regional economic development uneven. Lee Meriwether’s travels offered “food for reflection...on the march of human progress.” He had visited some of the most advanced and some very backward regions in Europe, North Africa, and his native United States. Geography permitted the detection of processes that moved human affairs, and every place provided information on a particular stage. There was no doubt that the world was growing smaller (Meriwether no longer resisted the allure of the automobile on the eve of World War I). Connections and dependencies grew. Happenings on one continent affected events on another, and rather quickly so. Pressure rose to reduce the differences in the ways of doing things and in defining goods; nomenclatures became ubiquitous. Meriwether was mindful that machinery and the division of labor vastly increased wealth, and that they “were beneficial in the long run.” But, he added, he could not shut his eyes “to the present suffering caused by such changes.” The “remorseless Juggernaut of modern times” affected lives everywhere. Artisans and laborers lost their livelihoods. Migration tore families apart. Economic growth derailed quotidian routines. Inequality bred discontent. Meriwether, in effect, was witnessing the acceleration of transformations taking place in the world’s systems of production and the rearrangement of its trade. *Globalization* is the label we use to designate these on-going phenomena today. The young American was a compassionate observer, yet his ruminations resonate through to the twenty-first century. When urging “political economists...to include human feelings in their calculations,” he anticipated today’s worries about the effects that global forces have on a local scale. Meriwether dreaded the uniformization of the manifold “kinds

of living” he had discovered and come to cherish as an expression of humankind’s cultural riches. In doing so, he questioned the tendency to let the market, including the food market, be the sole regulator of society. Culture—values, emotions, norms, habits, and beliefs—mattered because it breathed life into societies.⁴²

CHAPTER ONE

Food Production: Industrial Processing Begins to Gain Ground

PIERRE SAUNIER

Translated by Rosemary Kneipp

On the eve of World War I, several of the food industries had already been in existence for nearly a century, others for only a few decades, while still others had yet to make their appearance. It is therefore tempting to see the early 1900s as a midpoint in the history of the food industries, with the mature, primary processing industries on one side (flour mills, oil mills, sugar refineries, starch production, and alcoholic beverages) and on the other side, the newly emerging secondary industries, some of which were still in the making, or were vague ideas that were not to develop until much later. This distinction embraces the history of the food industries but does not explain their development. Important secondary processing activities such as the manufacture of chocolates, biscuits, pasta, and condiments were already considered as industries in the last third of the nineteenth century. Many chocolate factories, for example, employed several hundred workers, and, in some cases, more than a thousand. The primacy of primary processing

industries in the nineteenth century and the dominance of secondary processing industries in the twentieth century is an observation rather than an explanation of the expansion of the food industries. The principle behind their growth is their capacity to gradually replace traditional, non-industrial food-production systems, such as farming, small-scale, and household production. Replacing home cooking with ready-made meals is no different from what happened a century earlier when home-made bread was ousted by the country baker (note that Lee Meriwether still considered the baking housewife to be the rule in small-town provincial England in the 1880s¹). From this point of view, there is no reason to distinguish between primary and secondary processing industries. The areas in which the food industries expand may change but the principle will remain the same. Several paths lead to this expansion. Their exploration will provide a picture of the development of food industries, of how far they had already come by 1900 in order to gauge the road that lay ahead.

The first path has already been mentioned above. The food industries gradually came to take over areas that in the past had belonged exclusively to the realms of farming, small-scale, and household production. This can be illustrated by the successive disappearance of three traditional occupations that are currently very popular with advertisers: the miller and his flour mill, the dairymaid and her churn, and the housewife and her tasty little dishes. How did this come about and what strategies were used? Here, we will only consider the most important factor: the superiority of the food industries in terms of productivity and, therefore, cost. They quickly gained ground in those areas in which the difference in productivity was the greatest in comparison with traditional food-production methods. It is no coincidence that the first targets of the food industries were flour, fat, sugar, and beverages. These are all capital-intensive activities—for example, they represented 96 percent of the fixed assets of the food industries in France in the 1860s—that are easier to mechanize than other branches of the food chain, and in which the food industries were able to supplant non-industrial forms of food production at a very early stage.²

Neither is it a coincidence that it was only much later that the food industries replaced domestic food-preparation activities and—more important still—it was only because women had moved out of the kitchen, so to speak. The growth of the convenience and pre-packaged food market

owes less to the difference in productivity between the so-called housewife and the food industry than to the difference in earnings between women in the workplace and those undertaking domestic tasks. The monetary gain that encourages the housewife to give up her household activities and join the work force is a boon for the food industries and is particularly effective when the economic depreciation of housework, which is the corollary of the working woman, is combined with a symbolic depreciation of everything traditional. The downside of this new trend must be borne in mind when explaining the growth of the modern, quick-service foods market; that is, the disqualification of traditional practices (own consumption, housework, and so on, more or less implicitly associated with archaic customs), which accelerates their elimination and subsequent replacement with modern, highly esteemed practices.

The means by which the food industries triumphed over pre-industrial forms of food production—large-scale production, the division of labor, the mechanization of production processes, the branding, and so on—hardly need clarifying. However, it is important to remember that the growth of the food industries required an abundant source of regular, homogeneous agricultural inputs. Industrial slaughtering cannot exist without a relatively standardized pool of beef cattle further up the line. Neither can there be a dairy industry without a supply of stabilized, homogenized milk that has been refrigerated and pasteurized. The mechanization and automation of food-production processes, with the ultimate goal of a production process that is as continuous and fluid as that of the chemical industry, are impossible if agriculture does not provide the food industries with raw materials that have the same level of standardization as assembly parts in production workshops in the non-food industries. This meant that the secular growth of the food industries was inseparable from the modernization of agriculture.

The growth of the food industries obviously depended on the market penetration of the products. Many were products that were not spontaneously accepted by consumers. The example of the difficulties encountered in replacing farm butter with industrial butter at the beginning of the twentieth century is discussed further on. Commercial and non-commercial channels have a crucial role to play in facilitating the penetration of new products. Modern, dynamic, urban social groups who are quick

to adopt food innovations are one such channel; institutions such as the army, which help to overcome reluctance toward trying new foods (see below in relation to tinned food), are another. Advertising, too, is important. It has a dual function. First, it vouches for the quality of branded products and has been doing so regularly since the nineteenth century. Second, it is the main way that foods produced by different companies can be differentiated, as their technological content is very similar.³ As competition between firms becomes monopolistic, several kinds of differentiation strategies are stepped up: on the one hand, the vertical and horizontal differentiation of products that segments supply to appeal to all consumers according to their income, age, and taste; on the other hand, the delayed differentiation that consists in using the same production line to make standard products that are differentiated at the end of the supply chain by minor but perceivable characteristics, in order to offer a wider product range at a minimum cost. At the end of the twentieth century, the growth of the food industries was no longer dependent on their capacity to replace pre-industrial production types, but rather on the distribution of highly processed, highly packaged, highly branded products.⁴

VARIOUS IN-BETWEEN INDUSTRIES

This quick look at the growth of the food industries gives a better idea of what they were like in 1900 and shows how they differ from those we know today. There appear to be four main differences: (1) in 1900, everything that the growth of the food industries was to owe to the future manufacture of ready-made meals, pre-cooked dishes, quick-service foods, and so on, was still very vague; (2) packaging, presentation in individual portions, and labeling of foods, which would subsequently become an integral part of the food industries, were still mainly carried out by distributors and retailers; (3) the streamlining of production processes to improve flow—a more accomplished form of the automation of manufacturing processes⁵—was still very futuristic; (4) product differentiation and trademarks or brand names (not in the sense of a label certifying quality, but rather what they had started to become at the end of the twentieth century—that is, a simple emblem or “totem”⁶) also belonged to an undefined future. A fifth factor needs to be added, of a different nature this time, because it concerns

the structure of the food industries. It was not until after 1900 that the meat and dairy industries started to gain ground. Employment in these animal-based industries, virtually non-existent at the end of the nineteenth century except in the United States, increased rapidly in the 1960s until it was on a par with that of the grain-based industries. It should be noted that this change in the employment structure of the food industries was combined with a virtually constant total headcount if the population increase is taken into account: 1.1 employees per 100 inhabitants in France in 1901 as in 1982, half that in the United States in 1904 and 1987.⁷ Employment moved from the vegetable-based industries to the animal-based industries. It decreased as consumption dropped or where the productivity gain was highest (grain products, sugar, and beverages). It went up when consumption increased and where it was based on money.⁸

Let us consider what the food industries were like before these changes took place. They had two main characteristics: they were diverse and they were in a sort of in-between situation. Diversity is a fundamental trait of the food industries, but in 1900 it was further accentuated by a series of technical and economic changes: a change of energy sources (steam diffusion, then electricity) with its repercussions on the location of businesses; the switch from small-scale industry to large-scale industry; the switch from small batch processing to mass production; and, more generally speaking, the switch from the old world to the new world, to quote Gourvish and Wilson in relation to brewers: “[they] straddled the new world of large-scale manufacture and the old, rooted in agriculture—spheres which drifted so relentlessly apart in Victorian Britain.”⁹

These changes turned the early decades of the twentieth century into decades of transition. However, the transition from one world to another is only a general trend. It does not apply to all industries (nor to all places), or at least not in the same way. Some remained at the small batch-processing stage. The bakery, in keeping with its etymology (bread is baked in batches), remained a small-scale business. There were almost as many self-employed as employed. The average number of people per bakery in France, for example, was three, slightly fewer than in Great Britain or the United States. The production process remained discontinuous and industrial methods struggled to develop.¹⁰ On the contrary, American slaughterhouses and, to a lesser extent, sugar refineries, biscuit factories, breweries, and chocolate

factories had, well before the turn of the century, a foot in the new world. They were mechanized, with at least some degree of mass production. In short, not all the food industries took the same path from batch production to mass production and when they did, they went at their own pace.

Let us consider some other aspects of industrialization: the number of employees, the size of the production installations, and their concentration. Once again, the difference between industries is striking. The case of dairy products is a good example. Everywhere, farmhouse butter predominated (85% of production in 1890 and nearly two-thirds in 1909 in the United States). Industrial butter was produced by enterprises that, in 93 percent of cases, had fewer than five employees.¹¹ In contrast, cheese production appeared to be industrialized. The number of North American cheese factories jumped from 1,313 in 1870 to 4,552 in 1890, when they accounted for 93 percent of production. But in actual fact, it was no more than a cottage industry based on a network of very small enterprises working for local markets. It was not until much later, with the manufacture of processed cheese in the United States and brand-name cheese in Europe that cheese making really began to take on an industrial scale.

Let us take a second example of industries belonging to the same family, namely confectionery and chocolate making. Confectionery was dominated by small establishments (an average of 9 employees in the United States in 1900, 7 in France in 1901). The situation was quite the opposite in chocolate making (95 employees per factory in the United States in 1905, 46 in France in 1906) where, as we saw at the beginning of this chapter, certain factories employed more than a hundred workers and even many more in the case of Menier, for example, which had a headcount of nearly 1,300. Considerable economic disparity could therefore be observed, accompanied by the technical diversity mentioned earlier. This technical and economic diverseness was accentuated by a number of so-called national traits. Great Britain offers two contrasting illustrations: breweries and flour mills. The first was ahead of its European counterparts. It was soon industrialized by the middle of the nineteenth century but that did not prevent large-scale plants from co-existing with a network of very small breweries. The second, on the contrary, lagged behind.¹² It was not until much later that the roller mills that had replaced millstones in most countries were finally adopted in Great Britain.

Changes in production processes were one of the reasons behind the disparity of the food industries at the time. Old and new processes cohabited, but for varying periods of time depending on the industry, and affected industrialization in different ways. We will limit our discussion to two examples: butter factories and breweries. The manufacture of butter was mechanized at the turn of the century. New technical processes appeared (particularly the centrifuge at the end of the nineteenth century) without leading to the development of a corresponding industry. Technical modernization was not accompanied by economic modernization. The industrial butter factory developed slowly because industrial butter met with reticence from consumers. Its color, consistency, and taste were different from those of the farmhouse butter it was intended to replace.¹³ In this case, as in many others, the industrial variant of a traditional product took time to catch on, particularly since it mainly targeted overtly industrial alternatives such as margarine, whose promoters tried to facilitate diffusion by giving it a name similar to that of the traditional product it was competing with, namely butterine.

The breweries followed a different path. This time, two processes co-existed: the old process (top fermentation) and the new process (bottom fermentation), which took off in the middle of the nineteenth century (except in Great Britain and Belgium) because it produced a stable, homogeneous, storable, easily transported beer that could be consumed cold. But it was to take a very long time for the new process to eliminate the old process. In the 1900s, most large breweries used bottom (slow rather than the violent top) fermentation, but in terms of the number of plants, top fermentation still predominated up until the 1930s in France. The cohabitation of two processes explains the large number of breweries, their considerable geographical dispersion (beer produced by top fermentation does not travel well), and their high statistical dispersion. The coexistence of plants of different sizes in a given industry is the rule, and even a law, called Gibrat's law or rule of proportionate growth: even in branches dominated by a few large plants, numerous small factories subsist, working as subcontractors or for market niches. But while the statistical law remains the same, its parameters change. The breweries of 1900 and 1930 were not only far more numerous than those of the end of the twentieth century (in France, for example, there were 2,706 in 1901, 1,489 in 1931, and 48 in 1998), but

also less concentrated and more dispersed (Gini's coefficient of concentration increased from 33 in 1901 to 48 in 1998, while the coefficient of variation dropped from 1.8 to 1.5). As with other food industries, the brewing industry at the beginning of the twentieth century was more heterogeneous than it was at the end of the twentieth century; at that moment in time, it straddled the nineteenth and the twentieth centuries. It was an industry in-between two worlds.

Another component of this in-between period is the fact that at the turn of the century, production, processing, and marketing were not very dissociated. In many activities, entire areas of food processing were still in the hands of agriculture and commerce, which meant that the food industries had rather hazy outlines. Where exactly do agriculture and commerce stop? Where do the food industries begin? These are awkward questions which the people in charge of surveys had trouble answering. In the case of canning, for example, according to the 1905 *U.S. Census Bulletin*,

In theory, any process applied to raw or prepared materials that gives them new forms, qualities, or properties is considered manufacturing; but the canning or preserving of fruits and vegetables is an industry so closely allied to agriculture, and that of fish and of oysters to fishing, that neither has been classified as manufacturing except in the more recent Census reports.

The *Census* goes on to say in substance that it is impossible to link the different series of data, particularly since the same canneries produced both canned fish, and canned fruit and vegetables depending on the season. For dairy products, the problem was practically the same. "The manufacture of butter and cheese is so closely allied to agricultural pursuits that it is frequently impossible to make a satisfactory distinction between the operations of the farm and the factory."¹⁴

Another case of hazy borders between industry and commerce is that of butchers. Should they be included in industry (because they slaughter and process meat) or in commerce (because they are retailers)? The *U.S. Census* initially put them under industry and after 1870 they were included in commerce. However, after 1900, they went back on the change of classification, claiming that it did not satisfactorily deal with the case of meat sales

between butchers. In Europe, where slaughtering remained the prerogative of butchers until well after the 1900s, the definition of their activity, and therefore their classification, were crucial. Should the large majority of butchers whose main activities were slaughtering, wholesale trading, and even stock-raising, be included in commerce? The French census believed they should. The argument was the same as the *U.S. Census*: “While the killing of the animal and the dressing of the meat enhance the value of the raw materials, these processes alone would hardly warrant the including of slaughtering as a manufacture.” This is a debatable argument. It means that classification is no longer based on the economic characteristics of an activity (there must be processing in industry and retail sale in commerce) but on hair-splitting about its actual nature. Commerce thus includes those who do not really manufacture anything, covering both meat butchers and meat packers: it is because they make sausages, preserved meats, and so on that the *Census* classified them under industry: “The making of sausage, canned meats...and numerous other products which are adjuncts of the slaughtering industry, are, however, properly classed as manufactures.”¹⁵ As a consequence, industry concerns those who do manufacture something, even if they are also retailers (bakers and pork butchers). Pork butchers, in fact, are highly symptomatic of the difficulty involved in deciding between industry and commerce; sometimes they are found in industry and sometimes in commerce (in France, they were changed from industry to commerce in 1940).

The problem of where to draw the borderline between agriculture, industry, and commerce was to become less acute as activities gradually became more specialized. By the end of the twentieth century, the situation had been clarified: farmers provide inputs—and they are no longer called farmers but grain growers, livestock raisers, dairy farmers, and so on, unknown categories up until then (96% of all workers in the 1901 French census were landowners, growers, tenant farmers or day laborers). The food industries turn these inputs into foodstuffs that are then distributed by retailers. However, this dilemma at the beginning of the century shows that there was no clear border between what was a food industry and what was not, which also made it difficult to evaluate employment. What was the employment situation in the food industries in 1900? In France, in the 1901 census, the overall figure was 500,000, including butchers and pork butchers, and assuming

that for half of them—out of a total of 146,000—their manufacturing activity was greater than their retail trade. The number dropped to nearly 250,000 if butchers, pork butchers, and bakers (the latter totaling 178,000) were eliminated, and rose to a little more than 450,000 according to the most widespread definition, which included bakeries and—frequently, but not always—pork butchers, in the food industry. The differences were much the same in Germany: 1,037,000 people in the food industries in the German Empire, nearly 790,000 with no butchers and pork butchers included, and about 450,000 when bakers and pastry makers were also excluded.¹⁶

To give a more precise idea of the diversity of the food industries in 1900, we will study four examples in greater detail: slaughtering, biscuit making, canning, and sugar refining. In the case of slaughtering, we will see the differences between an activity that was already industrialized in the nineteenth century (American slaughterhouses) and an activity that had remained on a small-scale in spite of its modern construction (Parisian abattoirs). Biscuit making illustrates another dimension of the transition period—the time that passes between an industry's birth and its maturity. Biscuit making was already industrialized at the beginning of the nineteenth century but only for making biscuits for soldiers and sailors. More than half a century would be needed for industrial manufacture to start expanding and a century before it became widespread. The manufacture of canned goods shows the role played by institutions (the army in this case) in familiarizing people with new food products at the beginning of the nineteenth century. We will see that the same role was also played by domestic production. Beet-sugar refining is different from the other three examples and from nearly all the other food industries because it was created from scratch. That does not mean that it developed spontaneously—on the contrary, it was carefully nurtured by the public authorities—but that it had no agricultural or cottage-industry antecedents as most of the other food industries did.

THE AMERICAN PRODUCTION LINE AND THE EUROPEAN SLAUGHTER STALL

The differences between the Chicago slaughterhouses and the La Villette abattoirs in Paris are almost idiotypical. They show the enormous disparity that could exist in the same industry at the same time: both slaughterhouses

date back to the 1860s and both descend from a model that had been put into practice only two generations before. These differences are of three orders.

First, there was a difference in size: 8 million head slaughtered each year in Chicago, divided by 4 in Paris and by 20 if sheep are excluded; 120 hectares to yard the animals in Chicago and 24 in La Villette. Second, the processes were different. Chicago was a mechanized slaughter line, like that of Cincinnati created some decades earlier, but more sophisticated. The multi-stage construction plan meant that operations were virtually continuous, with slaughtering just a link in the chain. But it was a crucial link. It included a conveyor belt and task specialization (thirty different operations), everything that would be used in industry in the twentieth century, including the automotive industry. At La Villette, there were individual work cabins in which each butcher slaughtered the animals individually and cut up the carcasses. The productivity level was totally different from that of Chicago: only ten animals per booth per day. And thirdly, they were based on very different construction principles. Chicago was built very quickly. The buildings were wooden and the animals kept in stockyards in both summer and winter. The elegance and detail of the buildings at La Villette, on the other hand, are striking, with majestic iron and glass halls and large stables in which each animal had its own stall.¹⁷

This last contrast is most revealing. On the one hand, we have a nonsense project with adaptable equipment to accommodate an increasing number of animals, while on the other hand we have the desire to design a building that will leave its mark on its era. Yet this impeccable construction was frozen in the nineteenth century. Symptomatically, the Parisian work cabins were allotted according to seniority and governed by corporatist rules. There are many other indications that Chicago and La Villette belonged to two totally different worlds. One among them concerns the opposite social types: the meat packer, a nouveau riche with country manners—a yokel, as he is called in *Heaven Can Wait*—was unknown in Europe. He did have a counterpart, though, who was caricatured just as often, but in this case, it was a wholesale butcher or a cattle trader, never a captain of industry or a tycoon such as E. F. Stabel (the meat packer in question) who, with the help of his slogan “Mabel the cow: the most famous character in American advertising,” nourished the American people.

Why were Chicago and La Villette so different? It was not because of the size of the market. Paris, with its two million inhabitants, was just as populated as Chicago and the north-eastern areas of the United States, which the Chicago slaughterhouse also supplied with meat. Another possible explanation is the American propensity for mechanization in order to make up for a shortage of skilled labor, but the real reason lies elsewhere. The Chicago slaughterhouses cannot be compared with the Paris abattoirs because of their enormous reservoir of cattle; that is, the Great Plains west of the Mississippi, which had no difficulty in selling their beef to the north-eastern consumer areas because of the huge price differential (there was a ratio of 1 to 10 between Texas and the North). There cannot be a meat industry without a more or less standardized stock of beef, as we mentioned earlier. The American slaughterhouses are an excellent illustration of this. They were easily able to process the potential number of cattle at their disposal. But their huge size (more than 300 employees on average in the slaughterhouses of Illinois and Kansas¹⁸) can only really be explained if we consider the role played by transport and refrigeration. First the cowboy cattle trails, then the railways were to connect up production zones and consumer areas. Without transport, the huge potential of meat on the hoof was of no value. Without refrigeration, the slaughterhouses could only operate for part of the year. Transport and lower transport costs both provided access to territories that were previously inaccessible. They increased processing capacities and therefore made it possible to apply technical innovations.¹⁹ Low temperatures stabilize raw food and stop deterioration so that processing can be postponed and thus ensure regular, continuous manufacture. Transport and refrigeration were—and still are—the keys to growth in the meat industry, as in other food industries (dairy or brewery industries, for example). Without these two major changes, they would simply not have expanded.

BISCUIT MAKING: AN INDUSTRY ON THE WAY TO INDUSTRIALIZATION

Biscuit making is a different case from slaughtering. It is more typical, similar to that of chocolate making or, to take other examples, to the manufacture of condiments and of pasta. (In the early 1890s Lee Meriwether visited

the artisanal macaroni factories in Amalfi, Campania, that he thought were antiquated and primitive from an American point of view).²⁰ This time, the same evolution occurred everywhere, although sometimes a few decades apart. The situation of biscuit making was clearly perceived in the nineteenth century in contemporary writings, and particularly in the encyclopedias, which distinguished three periods: the era of the sea biscuit (or hardtack), the industrial manufacture of sea biscuits, and the industrial manufacture of other types of biscuits. These periods are still valid today.

The sea biscuit is a virtually universal food. It was the basic food of ship crews, the *panis nauticus* and *cocta cibaria* of the Romans. It was also the biscuit of soldiers—the military bread of Roman troops, the biscuit which helped feed the Venetian armies, and almost solely fed the French armies in the sixteenth century under the name of *Turkish stone bread*. Its lineage does not stop there. It is to be found again in the nineteenth century with the addition of meat and vegetables, but always with the same properties: inexpensive, easy to store, easy to carry, and long-lasting. And it was the hardtack that started off the industrial manufacture of biscuits. It began in the Royal Navy's bake-house in Deptford in 1804, where production was already on an industrial scale. Tasks were specialized (with each worker having the name of the operation he performed, such as shaper, marker, etc.) and coordinated (the workers all worked at the same pace). Their work was not automated until the 1830s, with the introduction of a mechanical conveyor belt that took trays of biscuits from one work station to the next.²¹

In the first half of the nineteenth century the consumption of industrial biscuits spread beyond the *natural* clientele of sailors and soldiers. As usually happens, it spread from the richest fringes of British society to the less wealthy groups, reaching the "bottom of the social scale" towards the end of the century,²² and was fostered by changes in consumer habits. In Great Britain, as in all comparable countries, people had begun to reduce their bread consumption (due, to an extent, to the introduction of the potato). Technical changes, such as standardization of the quality of flour due to the increasing use of roller mills, also contributed to the industry's growth. However, industrial biscuit making did not develop everywhere as early as it did in England. Huntley and Palmers, founded in 1826, already employed 300 workers in 1851 while LU, which was to become one of

France's largest biscuit factories, did not appear until 1886.²³ The writings of the nineteenth century clearly show the difference. In France, they confined industrial manufacture to sea biscuits or the biscuits produced by "large English establishments" (Larousse Dictionary in the 1880s). They considered that any other type of biscuit and those made outside England were produced on a small, artisanal scale. The same difference can be seen in employment. In the United States where consumption mainly increased at the end of the nineteenth century and the beginning of the twentieth century, employment grew very little after World War I. In France, where it was not until after 1900 that consumption increased (with per capita consumption multiplied by ten during the first half of the twentieth century), employment began to stagnate only in the 1950s.

At the beginning of the twentieth century, the average factory size (nearly 30 employees in France, more than 180 in the United States²⁴) clearly shows that biscuit making had become an industry everywhere. However, its economic weight and degree of concentration varied according to the country. In the United States, for example, a single company controlled 90 percent of the market. Several changes were to mark the evolution of biscuit making after 1900. The first was autonomization. Biscuit making ceased to be a branch of bakery (as it was in the United States up until 1914) or pastry cooking (up until 1910 in France), which is indicative of its increasing economic weight. The second was the continuing mechanization of manufacture.²⁵ Yet it was still limited. As in numerous food industries, weighing, bagging, and labeling remained manual up until the 1960s for two reasons: first, the low cost of female labor employed in these operations meant that mechanization could be postponed; second, the use of individual packaging and small portions, which was later to become standard practice, was still in its infancy. It was also in the 1960s that the differentiation strategies mentioned at the beginning of this chapter began to appear. They led to a supply that would seem far more abundant than before. However, their seeming abundance mainly resulted from combinations of materials, shapes and packaging, since the number of types of biscuits was reduced to ensure mass production. This increase in the number of sorts and the simultaneous reduction in the number of types are a good indication of the changes that were to occur in biscuit making, as in many food and non-food industries.

CANNED GOODS: LEARNING TO CONSUME NEW PRODUCTS

The preserved foods we are familiar with today are the result of various types of canning methods (pasteurization, sterilization, etc.) and refrigeration. But the range of preservation processes is actually much wider. Pickling, smoking, preservation using sugar, alcohol, and fat, ensilage, fermentation, and desiccation (applied to biscuits, among others) are all processes that have been known for centuries. Canning and refrigeration are quite different processes: they change the appearance, taste, and texture of goods to a much lesser extent. It could therefore have been expected that they would take off rapidly and that canning would be successful as soon as it was discovered at the beginning of the nineteenth century. However, that was not the case. The popularity of canned foods suffered not only from technical problems but, more especially, from their high prices which, for many years, made them luxury goods—hence the use of expensive raw materials (lobster, salmon, asparagus, green peas). It was only at the end of the nineteenth century that their consumption increased at the same time as their price decreased,



FIGURE 1.1: This canning factory, ca. 1880, combines bucolic charms with modern industrial architecture. Note that the advertisement highlights the supply of the army and the navy as a badge of product quality to foster private consumption.

and different qualities aimed at different social strata appeared on the market. For canned sardines, for example, there were roughly three qualities: “the first quality (that of the major brand names), the second quality produced both by factories and major brand names, and after that, the rubbish, sardines for export, for Negroes, an inferior product unfortunately sold in working-class towns, an awful product that does not deserve the name of sardine.”²⁶ Can it be inferred that the price drop is what caused the market to expand? The answer is not that simple. The widespread use of canned goods is not only explained by lower prices. It owes much to two non-commercial channels, namely domestic production and military institutions.

Domestic production only really began to exist after the 1900s but, from then on, it played an important role witnessed by the increasing sale of domestic sterilizers. Their success is due to the fact that making preserves corresponded to principles that were to become popular during the first half of the century: those of home economics. Making one’s own preserves meant applying several important principles: saving money, if not time (domestic production was to remain standard practice among farmers and the working classes, and it is still the trend today); implementing the precepts of food hygiene, also very popular at the time (bacteria control, sterilization, and a rational diet are all contemporaries and part of converging doctrines); and, more generally speaking, applying the important rule of moderation propagated at the time by domestic-science brochures, manuals, and teachings.

The interest shown by the military authorities is not surprising. They were always on the lookout for stabilized foods that could concentrate a large number of calories in a small volume: the sea biscuit is an excellent example. It was no coincidence that in the 1820s, the English Navy absorbed most of the production of tinned-food manufacturers such as Donkin, Hall, and Gamble or that it set up its own canning factory in Deptford. Wars, which have always provided the opportunity to experiment with both food and non-food innovations, encouraged the growth of tinned-food consumption. The Crimean War (1854–1855) significantly increased the outlet for French sardine manufacturers. A few years later, it was the American Civil War, via orders from the Union, which ensured the success of Gail Borden’s condensed milk, far more so than the hygienic properties on which it initially based its campaign to win over the civil market. Later on, during World War I, French soldiers were to discover

what they referred to as *monkey*—corned beef. The army was, therefore, a ready-made customer for canned-food manufacturers, but its role did not stop there. It also had an educational function. The men learnt to eat new foods which, for many soldiers, were canned foods and wine. The *Regiment*, boarding schools, and hospitals were all places in which new food habits were acquired and where reluctance to eat unknown foods began to recede. All in all, domestic production and collective consumption were to be vectors in shaping the tastes of consumers so that they would eventually buy what was soon to become a very common product.²⁷

SUGAR CONSUMPTION IN THE NINETEENTH CENTURY: AN INDICATOR OF DIETARY CHANGES

The sugar industry has lasting characteristics—to produce a sweetener, mainly used in the food industries, from sugar cane, sugar beet, or, more recently, isoglucose. These characteristics already existed in the nineteenth century but the main characteristics at that time were, first, the relationship between the sugar industry and the public authorities, second, the enormous increase in the consumption of sugar, and thirdly, the growth of the industry.

The sugar industry and the public authorities were closely linked. In France, the industry was created by the state that financed research, created schools, and monitored the development of sugar-beet production in order to counteract the continental system. This is not an isolated case. Almost everywhere, the public authorities used sugar to collect duties on consumption (50% and even more) and to subsidize exports. In the words of a French economist in 1901, “the entire European sugar industry is based on the subsidy system.” Taxation increased revenue but inevitably limited domestic consumption. The sole country to benefit was Great Britain, the only major importer in Europe (1.5 million tons per year on average) and whose *free breakfast-table* policy was aimed at keeping food prices down. Several conferences, including that of Brussels in 1902, tried to curb the sugar war, but it did not come to an end until 1914, with the onset of World War I.

Between the beginning and the end of the nineteenth century, sugar consumption in France increased by a factor of fifteen (it was admittedly very

low in 1800). The reasons behind this growth are at least as important as the growth itself. First, the rise in sugar consumption was the result of an increase in the consumption of biscuits, cakes, jam, tea, coffee, and chocolate. Second, it was non-egalitarian. In continental Europe, sugar consumption was elitist and urban. In the country, people—or at least men—did not eat sugar. It was only in the twentieth century, once again with habits acquired in the *Regiment*, that they began eating so-called feminine food such as coffee (with sugar), and later, sweetened drinks.²⁸ In Great Britain, the scene was completely different. The cheap food policy mentioned above and the food revolution in which local foods were partly replaced by imported goods (tea, chocolate, coffee, ham, etc.) led to high, widespread sugar consumption: 79 lbs per person before World War I. British workers consumed twice as much sugar as their French or German counterparts with “sugar and beer [...] perhaps the best indicators of working-class standards (tea was already a near-necessity, and its consumption highly inelastic).”²⁹ The rise in sugar consumption is therefore indicative of both economic changes (the increasing share of imported food) and nutritional changes. The increase in sugar consumption announces the deep-seated changes (drop in the percentage of carbohydrates, greater intake of fats and simple sugars) that are of concern to us today.

It would take some time for the beet sugar industry to become a real industry. During the first half of the nineteenth century, it remained very much on a small scale: empiricism and small production plants were the rule. Beginning in the 1850s, several innovations made manufacture more efficient. The use of chemical reactions—including lime scrubbing—meant that the old recipes based on heat, ox blood, and egg white could gradually be abandoned. Yields improved. In 1836, German factories processed an average of 1.3 tons of beet per day; by 1895, that figure had been multiplied by 300. Mechanization and automation accompanied the chemicalization of manufacturing processes. At the end of the nineteenth century, in the most advanced plants, operations were nearly all mechanized and continuous production had been instigated.³⁰ Sugar refineries were not what they were to become after World War II—the cousins of petrochemistry—but the optimization of production processes was well underway. As a result, the sugar industry at the end of the nineteenth century was already a mature industry. Its economic weight was significant in terms of employment, and more importantly, in terms of fixed assets and

investments (along with malting, it was soon to be the most capitalistic of all the food industries). It was also one of the best organized—the sugar industry was the first to set up an industrial union, in Zollverein’s Germany in 1841 and in Austria in 1854—and the only food industry whose managers had succeeded in joining the limited circle of “the most important families” and the industrial elite, at least in France.

In this text, we have examined the changes that occurred in the food industries during the second half of the nineteenth century. We cannot conclude, however, without mentioning a number of invariants that accompanied these changes and remained consistent throughout the history of each industry. These invariants are numerous: the size of the plants (small in the case of flour mills, large in that of breweries), the added value (low in slaughterhouses, high in beverages), the degree of capital-intensiveness, the employment structure. In packaging operations, for example, although the *modus operandi* has changed over the years—the *tablée*³¹ was replaced by a manual production chain, which later became automatic—the workforce itself has remained essentially the same. In 1850 as in 1950 and 2000, unskilled women are the almost exclusive employees on packaging lines in



FIGURE 1.2: Women’s work in the food industries, 1900, was repetitive but required dexterity. Pay was higher in capital-intensive industries like sugar refineries than in labor-intensive branches like canning.

canning factories, biscuit factories, and confectionery factories. Everything changes and yet, everything remains the same.

To understand what changes have really taken place, let us take a different perspective. If the people living in the nineteenth century were to see what has become of the food industries today, what would surprise them the most? Large factories? Mechanization? Production lines? Hardly. Informed observers of industry such as Turgan, Figuiet, Savoie, or Sinclair would be impressed with the widespread automation that has led to replacing qualified hands with laboratory controls.³² They would be impressed, too, with improvements in working conditions. However, what would strike them most would be the huge increase in commodification and of wage conditions. The difference between Sinclair's slaughterhouses or Turgan's large plants and their twentieth century counterparts is related less to the way they operate, or even to labor management³³ than it is to their economic environment. Unlike the nineteenth century, wages today are pegged to productivity gains, not only directly, but also indirectly (pensions, sickness, and unemployment benefits). The greatest innovation was the wage compromise introduced in the United States at the turn of the twentieth century and in Europe in the 1960s. In exchange for the revolutionary production methods that boosted productivity, not only the employed, but also the sick, the unemployed, and retirees were given a share in the productivity gains. This resulted in both an enormous increase in buying power, and access to goods and services that were totally unknown in the nineteenth century. It was this changeover to a universe based almost wholly on monetarism that was the driving force of the food industries in the twentieth century. Herein lies the difference between the food industries in the nineteenth, and those of the following century. The growth of the food industries in the twentieth century no doubt stems from their capacity to market food which, like any goods produced by Fordism, resulted in enormous productivity gains: a typical example is poultry, now a standard industrial food, generally fifty percent more expensive than beef at the end of the nineteenth century and half its price a century later.³⁴ However, the main growth vector of the food industries in the twentieth century lies, as mentioned above, with the large changes in the economy and the society as a whole: the makeover of a large part of the population that up until then had been self-employed and on the fringe of the market, into a salaried

population, a change that was accompanied by modifications in the wage system. What curbed the growth of food industries in the last third of the nineteenth century—not the first generation industries such as flour mills, oil factories, and distilleries at the peak of their expansion, but those that were only just starting to develop—was not inadequate technology or an insufficient production potential, but the narrow market. Technically, the food industries of the nineteenth century were ready to take off; the next century was to introduce no major technical or notable product innovations. The food products that stimulated the growth of the food industries in the twentieth century were nearly all present before 1900. It was the market outlets that were missing. They had not materialized. At least not yet.

CHAPTER TWO

Food Systems in the Nineteenth Century

YVES SEGERS

The long nineteenth century (or the Age of Empire) is a vital transitional period in the history of food culture in the Western world. The accelerated population growth that began in Western Europe around 1750, and the process of urbanization that followed, stimulated a quest for higher yields and improved productivity in the agricultural sector, given the need to feed the expanding population. Thanks to, among other things, the introduction of new crops and cultivation techniques, a better transport network, and enhanced technical know-how, farmers and food producers succeeded in meeting the exploding demand for food. However, population growth was not the only driving force. The increase in purchasing power among a large group of consumers also played a role. Initially, elite groups such as the aristocracy and the bourgeoisie stimulated demand for luxury foods and, hence, for innovation. However, in the last quarter of the nineteenth century the purchasing power of broad sections of the population increased. Combined with the rise in the number of city-dwellers and industrial workers, who were largely compelled to purchase their food commercially, these developments influenced the character of the food system.

These changes were fundamental and, above all, highly complex. A convenient framework for grasping and structuring this complexity is the concept of a *food system*, in which commodity flows are considered from producer to consumer. Scholars began to advocate this conceptual framework in the 1970s and 1980s. Since then, a number of historians, sociologists, economists, and geographers have developed their own versions of the food systems idea. One inspiring approach is the systems of provision theory (SoP) of Fine and Leopold.¹ In *The World of Consumption*, they presented a framework for analyzing and explaining consumer behavior, with the central place occupied by the food chain. This concept refers to the complex course taken by a product between the stage of production and that of consumption. The literature postulates six stages, namely (1) agricultural production, (2) food processing, (3) distribution, (4) preparation, (5) consumption, and finally (6) the processing of waste. Fine and Leopold stress the dialectical relationship between the various links of the chain. A modification of one link can have an influence on the whole chain. Consequently, no single factor can be neglected. Therefore, Fine and Leopold argue for working at a micro-level. In their view, detailed studies of product chains make it possible to gain an insight into the far-reaching and complex process of modernization of the food chain. However, this focus on individual commodities or product categories, such as dairy or milk, can lead to an overly narrow perspective. After all, the dynamics of a particular product are also determined by other foodstuffs and even product systems. It is therefore necessary to look at the global picture, and to study the entire food system.

Up to the present day, relatively little use has been made of the concept of food systems or the food chain as an explanatory framework in historical research. To a great extent, this attitude is due to the fact that historical disciplines still operate largely independently of one another. The two ends of the chain may have attracted a great deal of attention, but so far relatively little attempt has been made to integrate both visions. Moreover, the intermediate links in the chain, such as food processing and retail trade, have long been disregarded. Only recently have they attracted the interest of historians and other scholars.²

In an overview of this size, it is not possible to provide a comprehensive discussion of all aspects of the food system in the Age of Empire and to

take account of all countries and regions. The focus of this article is therefore precisely delineated. I will mainly adopt a socio-economic approach. The emphasis is on Belgium, and the developments in this small country are described within a Western European context. There is plenty of justification for this. Belgium, officially created in 1830, has a central position in Western Europe, was densely populated, and emerged as the first industrial nation on the European continent. Moreover, the north of the country (the polders, and the clay, and sandy loam areas along the North Sea) developed together with the Netherlands and England into one of Europe's most progressive agricultural regions (already from the Middle Ages onward). The chapter is structured around two chronological sections and will focus on the development of the three basic links in the food chain: production, distribution, and consumption, and their reciprocal influence or dependence. This evolution and transformation was characterized by four main trends: the food chain was lengthened, underwent processes of differentiation and intensification, and the balance of power shifted.

SELF-SUFFICIENCY AND SCARCITY, 1800–1880

From around 1750, the population of Western Europe increased dramatically. The reasons for this lay in relatively high birth rates and falling mortality rates, partly due to an improved standard of living and advances in sanitation and hygiene. In Belgium and Great Britain, population growth was coupled with a process of urbanization and industrialization. This implied that an ever-greater proportion of people lost the capacity or desire to provide any or all of their own food. Urban dwellers bought their food at the market, from street vendors, in shops, or directly from the farmer. The food chain thus acquired a stronger, more explicitly commercial and monetary character. Numerous farmers and food processors sought to respond to this changing demand, which also led to sharp price rises, especially of staple foods. In some countries, such as Belgium, producers mainly focused on meeting food demand in the domestic market. Other countries, such as the Netherlands and Denmark, laid the basis for the strong export-based character of their agricultural production during this period, in which the British market and especially London played a leading role.

SUBSISTENCE AGRICULTURE AND LIMITED MARKET INFLUENCES

By around 1800, the agricultural sector in Belgium and the rest of Western Europe faced the challenge of producing enough basic food to avoid Malthusian tensions (i.e. the unstable relationship between the available amount of food and total population). Production possibilities were limited, and were determined by climate and soil conditions. At the start of the nineteenth century, the agricultural sector mainly concentrated on producing staple foods, with as many calories as possible. In the Western European agricultural system, arable farming had long been dominant, with grains occupying a prominent place. The performance of the domestic agricultural economy was very important, since international trade in foodstuffs was still relatively limited, partly due to protectionist measures, high transport costs, and transport infrastructure which still took relatively little account of international connections. Thus the food supply was heavily dependent on the success of the national harvest, and if it was not particularly good, or if it failed, this situation led to price rises and, at times, to subsistence crises.

The mixed farm was still the most common type: arable farming and cattle rearing were largely interdependent. Cattle ensured not just animal products, but also provided fertilizer and traction. Farms in Belgium were usually small, particularly compared with countries such as Great Britain or France. Population pressure had led to a process of fragmentation, which was further stimulated by the introduction of equal inheritance (i.e., land was divided into equal parts between heirs on death) during the French annexation.³

There are no truly reliable data available regarding the market surplus in the nineteenth century. What is clear, however, is that only a limited proportion of overall agricultural production was commercialized. The patchy data for countries such as Belgium and Germany suggest that approximately 20 percent of cereals were sold through commercial intermediaries. The trade in foodstuffs was primarily local and interregional. Around 1800, the food-supply area of cities such as Brussels apparently extended no further than 18.5 miles for wheat and 12.5 miles for rye.⁴ These cities, as with others in Western Europe, also functioned as intermediaries

to organize food trade between deficit and surplus areas. They relied on their favorable geographical position for this, and local merchants operated within an interregional or even international network.

Particularly in periods of crisis and failed harvests, trade contacts arose with more distant regions. It may therefore be assumed that a large proportion of agricultural output was traded outside the official urban markets; in other words, within a more local and rural circuit of sale and barter. In the more peripheral and less fertile regions, barter possibilities existed in relatively closed local and regional market circuits. It was still customary in the countryside for laborers and farm-hands to be paid in kind, or to benefit from a system of board and lodging. Numerous farm-hands also purchased the food they needed directly from their employer. And some (industrial) entrepreneurs provided allotment gardens to their workers; in the mid-1880s Lee Meriwether noted the garden plots in front of tenement housing in provincial Belgium.⁵

It was not just the larger farms that produced for the market: smaller farmers (in Belgium this meant an average size of 1 to 4 hectares) also used surplus labor available during slow periods of the agrarian season to produce cash crops to cover growing costs and charges, such as land lease costs and taxes. For the same reasons, smallholders also took on other jobs, and were active in cottage industries. This process of proto-industrialization led to specialization in both industrial as well as commercial agricultural production. Of course, this process reinforced the commercialization of the rural economy. For instance, flax spinning and weaving developed in some areas into an important extra source of income. Elsewhere, additional income was earned from other activities such as wood-chopping, clog-making, and basket-weaving.⁶

PRODUCTIVITY INCREASES

As the population continued to rise, the need to push up the availability of more calories increased. The agricultural sector used various approaches in its attempt to achieve this. The introduction of new, nutritious crops was a first step in this direction. One crucial development from the late eighteenth century onward in Belgium (slightly earlier than in neighboring countries) was the spread of the potato and its incorporation into the diet of

broad sections of the population. The tuber had a number of advantages. A hectare of farmland planted with potatoes yielded twice the nutritional value of a comparable area of wheat. The potato is rich in vitamin C. Potatoes are also easy to grow and not particularly demanding in terms of soil type. They can be grown on low-grade and fallow land. In addition, potatoes are a summer crop, and hence less dependent on the weather conditions than cereals. This meant that the annual yield was largely guaranteed. Lastly, there was the favorable price ratio: potatoes represented relatively cheap food.

A second measure was the expansion of the area under cultivation, which was also very strongly supported by governments, especially during the first half of the nineteenth century. In most countries, including Belgium, the land concerned was mainly of a lower-grade nature, such as heathland and rugged land. However, in the Netherlands, for example, polder development also introduced new, high-quality productive land. In Denmark the cultivated area also increased by an impressive 25 percent in the period 1861–1912.⁷

A third strategy was to improve yields. Through the introduction of better techniques, such as better crop rotation and careful weeding, the application of more and better tools, and the purchase of high-quality seed and plants, progressive farmers sought to increase their output. Note, however, that Lee Meriwether reported in the mid-1880s: “Steam ploughs and threshers seem almost unknown in Europe. I saw none in Spain, Italy, Switzerland, Germany, or Austria. In Russia, I saw an American reaper.”⁸ The use of fertilizers to improve soil fertility (such as urban waste but also Peruvian guano) was encouraged. The food crisis of the 1840s and 1850s, in particular, convinced more and more farmers of the advantages associated with purchasing products from outside their own farm. Farmers (and especially the larger, more commercially oriented operators) became more dependent on these suppliers, although the extent of their dependence was still very limited. Thus, increasing numbers of horticulturalists or vegetable growers in the environs of large cities such as Brussels and Paris bought seed from merchants.

From the second half of the eighteenth century, governments in various countries gradually attached more value to the primary sector. The propagation of physiocracy in France led to intellectuals and the government

taking more of an interest in the primary sector. The physiocrats attributed a central place to agriculture in the economic system, and regarded farmers as the only productive class in society. In their vision, agriculture alone was productive and the soil was the only source of new wealth. From this viewpoint, the physiocrats argued that agricultural production should be stimulated and modernized. However, this did not result in a real, developed agricultural policy. Government mainly concerned themselves with the organization of the trade in foodstuffs. The continental blockade applied by Great Britain to French-controlled ports at the start of the nineteenth century is one example of this. Even more important, however, was the cereal policy that many European governments introduced from 1815 onward. The challenge was to reconcile the farmers' interests (in this case the large landowners who dominated commercial cereal cultivation), with the provision of sufficient cheap staples for consumers, who were at that moment also contending with increasing impoverishment. Great Britain, France, Belgium, and the Netherlands were among the countries that, from the 1820s and 1830s onward, introduced a sliding scale of import duties on cereals, in order to reconcile the wishes and interests of producers and consumers more efficiently, although the interests of large landowners continued to be given priority. In other countries, such as Denmark, the government established grain stocks in order to organize the supply more effectively and, in particular, so as to be able to influence the market price.⁹

The food crises of 1845–1847 and 1853–1854—subsistence crises caused by successive failed harvests of staple items (potatoes and cereals)—ultimately led to structural adjustments to government policy. The international trade in foodstuffs began to be organized on a more liberal basis. The crises ensured the breakthrough of the idea of free trade in an open market. International free trade gradually emerged, and spread rapidly with the signing of the Cobden–Chevalier Treaty of 1860. By the 1870s the liberalization of the agricultural market was complete in most Northern and Western European markets. Nor was it just the international markets and trade contacts that were placed on a more liberal basis during the first six or seven decades of the nineteenth century: in many countries, internal trade barriers were weakened and even lifted. In Great Britain, these internal trade barriers had been abolished earlier on, so that an integrated, national, competitive consumer market existed there from a much earlier

stage. In Belgium, the liberal government acted in 1860 to abolish the local *octroi* system by which cities and large municipalities could autonomously impose import and transit taxes on consumer goods, including many types of foodstuffs. This led to downwards pressure on consumer prices, but also to more intense trade contacts between the city and the countryside and to a growing variety of foodstuffs on the urban markets. The impact of the Deutscher Zollverein, established in 1834, was even more important. It united seventeen German states, representing a combined consumer market of twenty-three million inhabitants, in a common free-trade area, and other German states joined during the decades that followed.¹⁰

TRANSPORT AND DISTRIBUTION NETWORKS

In a society characterized by accelerated urbanization and industrialization, the role of wholesalers and retailers as a link between producers and consumers increased considerably. The character of the food chain was significantly influenced before 1880 by the development of a modern transport infrastructure and the introduction of new means of transport. Since the late eighteenth century, most governments in Western Europe had stimulated the construction of paved roads and canals, and the canalization of navigable rivers. Private entrepreneurs also played a part in this, especially in Great Britain. This was followed from the mid-1830s onward by the development of a fine-meshed railway network, first of all in Great Britain and Belgium, and later also in other European countries. Through these initiatives, it became possible to transport agricultural produce and foodstuffs far more quickly, efficiently, and, above all, cheaply. This also meant that other foodstuffs, such as perishable goods, could now be conveyed over longer distances. The transport costs for interregional and international trade fell substantially in the course of the nineteenth century thanks to the use of steamers, trains, trams, and so on. Research looking at various European countries has revealed a process of market integration that already started in the late eighteenth century. The prices of foodstuffs such as cereals in different regions drew closer and closer together. Improved communication technology, such as the modern postal system and telegraphy, meant that information about commodities and price changes was available far more easily and quickly. In other words, transaction costs fell sharply in this period.¹¹

The modernization of transport influenced food distribution strongly. With the increasing commercialization of the agricultural system, ever-more farmers and market gardeners started to wonder how best to market their produce. Some opted to sell their crops to itinerant intermediaries or wholesalers. This saved them the time and energy involved in selling their own produce, but of course this method of trading resulted in a less than optimal sale price. Farmers also had a limited understanding of real production costs. Setting a price was not easy. They were dependent on the price that brokers offered, usually negotiated in good faith, adhered to traditional agreements, and thus did not always adopt a rational stance. Once the transportation of foodstuffs became easier, increasing numbers of farmers and market gardeners opted to sell part of their produce themselves at local markets or more remote urban markets. This was mainly the task of farmers' wives and daughters. Sometimes they would go from house to house, selling milk, vegetables, and other foodstuffs. On the return journey, some of them would purchase exotic fruits and industrially processed foodstuffs that were hard to find in the countryside. All this led to a profound change in the retailing system. In Belgium as well as in other European countries an increase in the number of markets and market days occurred in both city and country. At the same time, the number of food shops also gradually increased. The number of general and specialist food businesses rose: bakers, butchers, dairy shops, greengrocers, and so on.¹²

FOOD PROCESSING AND THE DEMAND SIDE

The processing of agricultural produce and foodstuffs was for a long time mainly located on the farm. Farmers' wives would process products such as meat, vegetables, fruit, and dairy items (butter, cheese) for their own household consumption. In doing so, they often used time-consuming techniques. Vegetables were preserved or dried. Fruit was turned into syrup and jam. Meat was salted and smoked. However, by no means was all the harvest for internal consumption. For instance, butter and cheese were largely intended for commercial purposes, being destined for the local, regional, or even international market. The trade in butter in particular had an international character, even during the first half of the nineteenth century. The British consumed butter from various regions on the continent, such as Normandy and Friesland.

Food processing outside the farm was predominantly small-scale, employed few personnel, and was traditional until well into the nineteenth century. The food industry was mainly situated in the countryside or in port cities, and in Western Europe consisted mainly of mills, sugar refineries, breweries, gin distilleries, and small slaughterhouses in the cities. The techniques employed were usually craft-based. Unless engaged in luxury production, these businesses produced for the local and national market. By contrast, city-dwellers were largely dependent on the market and on the commercial circuit for their food supply, which obviously provided a powerful stimulus to the development of the retail trade.¹³

AN INTERNATIONAL MARKET FOR FOOD, 1880–1920

The last quarter of the nineteenth century marked the beginning of a new phase in the development of the food chain and the modernization of the Western European economy and society. From around 1880, Western European agriculture came under increasing foreign pressure. Cheap, high-quality wheat from places such as the United States, Canada, and Russia flooded into Europe on a huge scale. The U.S. export of wheat rose from 59 million bushels in 1870–1874 to 184 million bushels in 1895–1899. The vast majority of this was intended for Europe. More and more foodstuffs, such as fruit and vegetables, also flowed into Northern Europe from the Mediterranean region.

The consequences for Western European producers and consumers of this globalization of the agricultural and food economy were far-reaching. The price of grain, and hence of bread, plummeted in all European countries. In Belgium, the price of bread halved between 1880 and 1910. As a result, the classic Malthusian tension was dispelled once and for all. From then on, the failure of cereal or potato harvests in Western Europe went without significant consequences. Moreover, it was not just cheap wheat that was imported. Via international ports such as Antwerp, Liverpool, and Hamburg, an increasingly varied assortment of products and foodstuffs flowed into the continent: fresh and frozen meat, maize, sugar, rice, oil, wine, exotic fruits. The international trade in food increased enormously during the nineteenth century, from 4 million metric tons in the 1850s to nearly 40 million by the eve of World War I. Most of this trade was between Western Europe and the European-settled overseas' areas, in

particular the United States, and the colonies in Africa and Asia. European colonizers made systematic use of their overseas territories to maintain their food supply and the provision of raw materials for the food industry. To a large extent, these specialized in a number of products: tea came from Asia, cocoa from Africa.¹⁴

For the consumer, the increasing integration of the international markets was thus a positive development. The supply increased substantially and prices fell noticeably, leaving space in household budgets for food products that were more luxurious or regarded as less vital, or for the purchase of other consumer goods and services. As a result, relative expenditure on food decreased (in Belgium, its share dropped from 70 to 80% c. 1850 to an average of 50 to 60% by around 1910). People's diets improved in terms of both quantity and quality. European farmers, however, were confronted with a real agrarian depression and had to think about possibilities for maintaining their incomes at the same level. Besides, many of them could not survive the agricultural transformation and searched for an occupation in modern industry or migrated.

AGRICULTURAL POLICY AND MODERNIZATION

European governments reacted in different ways to the agricultural competition from the United States. For example, the Belgian government decided against completely dismantling free trade, despite fierce protests from the agricultural sector. It placed no controls on the import of cereals and staples, as this helped prevent social unrest and pressure to increase workers' wages in industry. Limited import duties were introduced for a number of foodstuffs, such as meat, flour and pasta, fruit, vegetables, preserves, and dairy products. The intention was clear: the government sought a new balance between traditional arable farming and the emerging food industry. Using selective customs duties, it was seeking to turn farmers toward more profitable market segments, for instance cattle farming, which became increasingly dependent on cheap overseas grains. This supportive and stimulatory policy was coordinated by a newly established Ministry of Agriculture (1884). Great Britain, the Netherlands, and Denmark also remained loyal to free trade. By contrast, Germany and France reintroduced protectionist measures, albeit selectively.

Western European agriculture changed dramatically. The less profitable farms were forced out of business. The food economy manifestly evolved from the 1880s onward from a traditional production system in which arable farming was predominant and market orientation was limited to a commercial agriculture to a reorientation toward more competitive products. This is illustrated in Belgium by the change in the degree of self-sufficiency for cereals, which fell from 65 percent around 1880 to barely 28 percent in 1910. The share of cattle farming in overall agricultural output rose from 45 to 65 percent. However, this also meant that Belgian farmers largely abandoned their role as producers of staple foods, which, incidentally, would cause problems during World War I.¹⁵

Farmers in Western Europe responded to increased demand for foodstuffs and growing international competition by further improvement of production techniques. Producers also raised their efforts to sell their products on the foreign market to new levels. In virtually every Western European country, output and productivity grew at an accelerated rate, although it is clear that a real growth spurt only occurred after World War I. A number of factors explain this development.

First, regional specialization increased: regions began to produce as a function of soil conditions, available expertise, or specific consumer demand, given that the need to produce mainly staple foods for the population was decreasing, as cereals could be imported easily. It is therefore no coincidence that at the end of the century in Hesbaye, a fertile cereal-growing region in eastern Belgium, cereal farmers largely turned to fruit-growing (apples and cherries). Thanks to the presence of railway links, the crop could be sold efficiently in nearby consumption centers (the industrial region of Liège and the Ruhr in Germany) and even the London market. Poorer quality fruit could be used in the local syrup industry.

Second, more raw materials and products were bought in from outside the farm, such as fertilizers, cattle fodder or plants, making farms increasingly dependent during this period on industrial and other suppliers. As a result, arable farming yields rose appreciably between 1880 and 1920; the potato yield rose in Belgium by a factor of 2.5. Third, labor-saving machines and new scientific knowledge, which was diffused to farmers via education, lectures, and magazines led to greater efficiency. Agronomists and government officials were also supporting the export of agricultural

produce and foodstuffs via market research. In Belgium, for example, they gathered information about consumer habits and the taste preferences of French, German, and British consumers. They gave advice on the most attractive way of packaging commodities, the best moments for introducing products into the foreign market, the best sales techniques, and so on.¹⁶

THE MODERN FOOD INDUSTRY

A sharp rise in purchasing power stimulated the demand for foodstuffs, including more expensive and higher quality products such as dairy products, meat, chocolate, and confectionery. This rising demand was met by means of mechanization, upsizing, and the introduction of numerous technical innovations in areas such as processing, conservation, and packaging. Particularly during the final quarter of the century, the food industry underwent thorough transformation. Modern factories for margarine and dairy products, cans, meat products, and so on were built. Moreover, there was a trend toward concentration in the sector. Investing in the new technology was the only way of meeting the fierce domestic and foreign competition, and that was too costly for many small family businesses, which were absorbed in larger companies or entities and developed from family-owned companies to public limited companies. For example, the mass import of cereals led to an enormous upsizing process in the milling sector: industrial flour mills were established in ports and industrial regions. Large international trading companies began to control grain processing, such as the French company Louis Dreyfus and later on, ACT in Hamburg. They alone were capable of ensuring a continuous supply of good-quality grain and of making the necessary investments in infrastructure (such as storehouses, conveyors, and grain elevators).

The transition from small-scale and craft-based to industrial and mechanized food companies was not linear.¹⁷ In some cases, smaller businesses successfully held out against technological innovation. Thus, up to the time of World War I small family bakeries continued to operate alongside the new industrial ones in many cities. Likewise, in the Belgian dairy sector, small, manually operated or steam-powered milking parlors in the countryside sometimes managed to withstand the impact of larger, modern milk plants for several more decades. Ultimately, however, the struggle proved

an unequal one. Modern businesses had ever-greater capital requirements. For example, they needed to advertise, since the products of the modern food industry needed to find a niche in the market. By means of a carefully chosen image, they tried to entice consumers to buy. These sales techniques were originally developed in the United States and, later, crossed over to Europe. Food companies from the United States developed an expanding demand for branded products and introduced American business and marketing practices to the European market.

In the late nineteenth century, industrial food production also displayed a clear trend toward greater use of scientific knowledge and chemicals. Food production and the functioning of the entire food chain could be controlled more effectively than ever. New foodstuffs could be made and synthesized (e.g. margarine), they could be kept for longer (which meant that the seasons had less and less impact), and food could be transported over longer distances. The trade in livestock between Europe, Argentina, and the United States already existed around 1850, but remained on a small scale. The introduction of refrigeration and canning altered this. The first refrigerated ships with chilled beef and frozen meat from the Americas, Australia, and New Zealand reached Europe in the late 1870s. Around the turn of the century, refrigerated ships also brought New Zealand butter and Jamaican bananas to Europe. The processing of basic ingredients and the creation of new products and production techniques, such as the modern chemical conservation of food, led to concerns regarding the authenticity and quality of foodstuffs. The disappearance of self-sufficiency and the declining role of households in the food chain would further reinforce this.¹⁸

PRODUCTION AND CONSUMER COOPERATIVES, AND NEW RETAIL SYSTEMS

For a long time, many farmers primarily focused on producing foodstuffs. Identifying a lucrative market and obtaining a good price usually came second. As small suppliers of products that usually had a short product life, farmers had little power over pricing. Selling through itinerant wholesalers, such as cattle dealers or fruit buyers, was definitely less time-consuming than selling their products in nearby markets, but this yielded a

lower price. In order to gain greater price security, even before World War I some market gardeners were entering into fixed contracts with wholesalers or canning factories, for instance. Moreover, it never made sense to sell the entire harvest all at once. In the middle of the harvest season, when the supply was plentiful, prices were low. Fruit dealers, for example, made every effort to keep the fruit for as long as possible, so that they could sell it when prices rose.

Low prices and frustrations with intermediaries encouraged farmers associations from the 1880s onward to set up production and selling cooperatives. Denmark and the Netherlands were among the countries to take the lead in this. Joint production and selling offered numerous advantages. First and foremost, cooperation generated benefits of scale. Thus the supply of sufficient incoming basic products and raw materials was ensured, and this made it sensible to move over to modern technology. A second advantage was the use of competent, qualified personnel: they followed new trends in the sector closely and monitored the product quality. A third advantage was the commitment of the farmers who were members of the cooperative. All shared in the profits (in proportion to their contribution) and therefore tried to deliver raw materials and products of the highest possible quality. In time, this led to a process of vertical integration and to greater control by the cooperatives over the entire food chain. Fourth, combined selling gave farmers more influence over pricing and extended their sale range to the national and even international level. Finally, collective selling was also an important labor-saving measure.

The first Belgian cooperative factory was founded in 1888, and dealt with dairy products. In 1907 there were already 544 enterprises. Most of them were small, manually operated butter factories, although there were also some big steam factories, but not as many as in the Netherlands or Denmark. Special markets for the sale of early potatoes, vegetables, and butter and eggs were founded c. 1900, which was stimulated by the Belgian Farmers Association, a Catholic organization whose myriad campaigns and activities aimed to sustain the peasant family economically, socially, and, of course, spiritually. In many countries quality and hygiene were stressed, for instance with special quality marks. Dutch and Danish butter had suffered from a bad image for decades; butter that came directly from the farm or from small factories was especially noted for poor quality. To

convince consumers, the Dutch and Danish butter cooperatives introduced quality labels and paid considerable attention to efficient packaging and presentation techniques, which certainly goes some way toward explaining their greater success on international markets. In Belgium, producers and cooperatives only made serious efforts to promote product quality abroad during the interwar period. In Great Britain, where production cooperatives remained insignificant, producers set up marketing boards during the interwar period, and tried to influence the market in this way.¹⁹

From the end of the nineteenth century, the traditional retail system assumed a new character in Western Europe. The importance of weekly markets, especially in urban settings, seems to have decreased, while the number of shops and the product range on offer continued to increase, including in the countryside. General and specialist food shops spread across the country and also appeared in the suburbs and, later, on the outskirts of cities. Shop-keeping changed from being a craft (in which the shopkeeper would sometimes produce products himself) to consisting purely of retail. More and more goods were supplied in processed and pre-packaged form. Keeping a shop was thus a way of supplementing the family income. The entry cost was low: little initial capital was needed, and this resulted in numerous small shops, usually run by women. Their success was largely determined by the fact that they allowed buying on credit (unlike market traders, chain stores, and department stores). Naturally, the large number of small shops in cities led to increasing competition in the retail sector, keeping prices down, which generated fraud. This trend was further reinforced when new distribution forms appeared at the end of the nineteenth century.²⁰

Chain stores (or *multiples*) appeared in Belgium in the late 1860s, but achieved their real breakthrough two decades later. Branches all over the country and in the tiniest villages were supplied from a central warehouse. The goods, at first mainly foods and colonial goods, were pre-packaged, uniform, and had a fixed price. Thanks to these benefits of scale and strict management, pricing was competitive, especially from the late 1880s onward, when the chain stores also started to produce their own products, such as coffee, confectionery and sugar-based products, gin, liqueur, and so on. Another new phenomenon at the end of the nineteenth century was the consumer cooperative. In Belgium, in particular the socialist movement

played a pioneering role in urban centers, while Catholics set up initiatives, mainly in the countryside, and particularly after World War I.²¹

CONCLUSION

It is beyond doubt that the food chain changed fundamentally during the long nineteenth century. This was true not just of the various individual links, but also, and above all, of the nature of their interrelationships and mutual dependence. Four basic processes can be distinguished. First, the chain was *lengthened*: the number of intermediate links in the food system increased. Around the mid-nineteenth century, agriculture on the European continent was mainly oriented toward self-sufficiency, with a less commercial character. Agricultural produce was usually processed on the farms themselves. Thus, farmers' wives used milk to make butter and cheese, which they would sell themselves in the nearby town. Only from the end of the century did the first dairy factories appear, whether on a cooperative basis or otherwise. They usually operated in a relatively small-scale fashion and in a regional or inland context. Eventually, producers stopped marketing their harvest themselves. Merchants, other dealers, cooperatives, and modern shops gradually took over these tasks. Moreover, the geographical distance between the different links also grew. Thanks to the development of a more efficient transport network, new means of transport, and better preservation methods, the geographical distance between the beginning and end of the chain increased.

A second development can be defined as a process of *differentiation*. The individual links or phases in the chain themselves became far more complex. An example of this is the development in the processing sector. As well as needing more technological know-how, food producers also had to comply with newly established rules about hygiene and health; these were usually set by governments, although more and more instructions also came from the processing sector itself and, in time, even from the distribution sector. This led to increasing specialization in all links of the food chain and in some sectors to vertical integration.

Third, a process of *intensification* took place. The interdependence of the various links became ever greater, and the system became ever-more tightly intermeshed. Activities in the chain were increasingly adapted to

one another. When the task of processing agricultural produce into food-stuffs was handed over by the producers to the food factories, the two parties naturally had to make proper arrangements.

In parallel with this intensification, finally, a *power shift* also occurred. In the mid-nineteenth century, farmers and market gardeners largely decided for themselves what they produced and how. Of course they also took account of market requirements, but they seem to have had far more autonomy than they did by the early twentieth century. Although they then tried to gain more control over the food chain via the establishment of cooperatives and the lobbying of policy-makers and regulators, other actors nonetheless seem to have acquired more influence or power. In some sectors, as early as the interwar period, farmers became tied to the requirements and demands of the food industry and/or supermarkets via the system of contract growing.

CHAPTER THREE

Food Security and Safety

VERA HIERHOLZER

“There is death in the pot”—in 1820, this warning on the cover of a scholarly treatise attracted public attention in England. The slogan, adapted from the Old Testament, was uncommonly sensational for a scholarly publication, but succeeded in its aim: the piece “A Treatise on Adulterations of Food and Culinary Poisons” by Friedrich Accum,¹ a German chemist associated with the Royal Institute in London, sold exceedingly well. Within a month, the thousand copies of its first edition were sold out. A second edition was printed in London the same year. Two years later a German translation was published in Leipzig.²

Drawing on his own foodstuff analyses and on publications by colleagues, Accum reported on what he perceived as a steady rise in instances of food adulteration in England. Accum’s results did not remain unsupported: thirty years later the physician and chemist Arthur Hill Hassall provided a similar treatise, which was also serialized in the medical journal *The Lancet*.³ Complaints about the quality of food also became increasingly frequent in Germany. In particular during the 1870s, a wide public debate on increased adulterations was taking place. There were numerous books, memoranda, as well as articles in daily newspapers and journals that noted similarly severe conditions as those found in England.⁴ The content of such messages of caution coincided to a large extent: they included reports on milk diluted with water, wine colored with fuchsine, sausages

stretched with flour, and on many similar instances of adulteration. The frequency of cases in which valueless substances were added to food in order to increase weight or to enhance appearance was felt to be growing continuously. Although such manipulation would not always directly cause adverse health effects, the continued consumption of low-quality food was, ultimately, certain to lead to severe consequences.

However, England and Germany were not the only countries to struggle with such occurrences: in the nineteenth century, all emerging industrial states in Europe as well as the United States saw lively public discussion around matters of food quality.⁵ While the intensity and the exact time frame of these debates varied, their development and the consequences corresponded to a large extent. It is difficult to determine whether the frequency of adulteration was indeed increasing from that time onward, even more so as terms such as *adulteration* and *quality* are abstract concepts which depend on conditions specific to a certain time and context.⁶ However, a heightened public awareness for questions of food quality was evident during that time. This was largely due to the processes of change closely related to industrialization and urbanization that were taking place in all industrial countries—the attitude toward nutrition was transformed by an improved nutritional status and by the increasingly engineered modes of mass production. Around 1850, the problem of recurring subsistence crises was overcome and regular provision for wide parts of the population was secured. Thus, more attention could be paid to food quality. Increased division of labor lessened the importance of the subsistence economy. More and more people now depended on provisions available through the market. The heightened complexity and anonymity of commercial-market procedures multiplied asymmetries in information between producer and consumer. From the consumers' perspective, opportunistic misuse of the traders' superior insight became increasingly likely in comparison with pre-industrial times.⁷

In addition to this, the rise of nutrition science and its popularization contributed to a changed perception of food. On the one hand, new precise procedures of analysis made ostensibly objective measurements of food quality possible. With their help, even minute impairments in physiological worth could be verified.⁸ On the other hand, scientific findings enabled food producers to develop new production technology and additives, as well as

completely new products. Pre-modern regulations mainly concerned with obvious toxic alterations were hardly equal to such rapid innovation.⁹

In England and Germany, public concern promoted food regulations. In England, the first law was launched in 1860 that provided food monitoring with a new foundation. In 1879, the first food law of the German Empire followed. Between 1860 and 1910, numerous other European states established new food laws. Monitoring instruments that had previously existed were felt to be inadequate in dealing with changed conditions. Insufficient monitoring and lax jurisdiction gave constant cause for complaints. Laws that were in place were frequently a mere patchwork of local, regional, and centralized regulations which corresponded to pre-modern conditions, and were often restricted to individual foods. Systematic preventive control was rare and usually confined to bigger cities.¹⁰

In this chapter, the developments in Germany and in England will be analyzed as examples of the attempt to adapt food monitoring to the conditions of the industrialized economy. England can be considered as one of the trailblazers of modern food regulation. The German Empire, on the other hand, became an industrial nation significantly later and thus provides an instance of a process of regulation that was at least partly modeled on the English example. In several respects, both countries can be held as representative of the development of national food regulations during the nineteenth and early twentieth centuries. This is the case not only because of comparable conditions that caused a need for new regulations. It is also due to the fact that processes of negotiation and ensuing legal structures were similar in many industrial states. These parallelisms will be examined alongside differing characteristics of specific regulations and the causes for such differences. The chapter will draw particular attention to the interaction of normativities whose legal status differed: the influence of industrialization did not merely shape national regulations. The fact that actors other than the state—scientists, local governments, trade associations—were participating in regulation processes was an additional innovation. Indeed, they played an active part in the negotiation of national legislation, decidedly influenced jurisdiction, and even took action themselves. Finally, connections between the German and the English examples and the developments that took place in other European states are established. Problems and attempted remedies were often strikingly similar,

and thus it makes sense to consider communication on food quality taking place across state borders at the time.

STATE REGULATION

How was the state able to accommodate the fact that food regulation as a topic was subject to rapid change or was at least constantly expanding? How could the state anticipate future technical innovations in food production, as well as new findings in nutrition science and ensuing shifts in evaluation? How could legal tools be established that would account for such changes in the future? Legislators in England and in the German Empire were equally troubled by such questions.

England was a part of the vanguard of industrialization. As a consequence, English legislation not only systematically assessed the issue of food early on, but also dealt with it in a significantly more sophisticated and comprehensive fashion than its equivalents in other European states. English food monitoring was established gradually and in close correspondence with the public-health movement and its campaign for improved hygienic conditions, particularly in cities.¹¹ Experts were systematically involved in the preparation of legal reforms: in response to the campaigns described above, the parliament appointed a commission in 1855 that evaluated the then-current state of food monitoring, drawing on the expertise of chemists, health officials, and tradespeople. Afterward, the commission provided concrete suggestions for improvement. Based on this groundwork, the first modern food law was passed in 1860.¹² However, the law remained as “dead letters” since it was felt to follow “an uncertain course between conflicting views” and was thus never properly enforced by the authorities.¹³ So-called public analysts, who were to examine food samples at regular intervals, were assigned a central role. However, twelve years after the law was ratified no more than twelve analysts had been hired. Furthermore, examinations were initiated through complaints by private people. Fraud detection was thus left to the responsibility of the consumers. In addition to this, penalties were still extremely mild: the general penalty for adulteration was a fine—imprisonment only occurred in default of payment.¹⁴

Therefore, scientists continued their agitation for stricter legislation and thorough controls. In 1872, they succeeded in bringing about an additional

law, the Adulteration of Food, Drink and Drugs Act. This law established more systematic controls. More and more towns were then able to hire analysts. The Local Government Board became the first central institution to participate in the monitoring process. Cooperation between the new analysts and the established “Inspectors of Nuisances,” who held the authority on markets, measurements, and weights, was institutionalized. This was achieved by forcing the latter to provide the analysts with regular food samples.¹⁵

However, the enforcement of this law still differed significantly across cases.¹⁶ In particular the selection of public analysts, the contradictory reports, and the wavering jurisdiction were subject to criticism. There were debates around the question as to whether legislation should provide concrete rules for the composition of particular foods. One strong point in opposition to such regulations was the fluctuating nature of food, which rendered fixed boundaries impossible. Some people feared that minimal standards would lead to a generally low quality of food that might then be produced to only just meet the standards.¹⁷ The Sale of Food and Drugs Act, which was ratified in 1875, consequently refrained from establishing concrete norms for individual foods. However, it contained a more precise and expanded catalogue of chargeable acts. It explicitly stated that no one should sell, to the prejudice of the purchaser, any article of food or drugs “which was not of the nature, substance and quality of the article demanded.”¹⁸ Furthermore, mixed foods could only be sold if they were marked as such. Some penalties were increased significantly. However, the food industry was accommodated in so far as soft rules of negligence were introduced and the previously obligatory publication of convictions was dropped. The organization of the monitoring process was also rearranged: the General Tax Office became the instance of arbitration for controversial cases. The recruitment of analysts was now obligatory if the Local Government Board demanded it or if a previously occupied position had become vacant. In the following years, the Local Government Board indeed systematically enforced the hiring of analysts, who had to deliver regular work reports. The combination of preventive and repressive measures of control was now definite.¹⁹

Nevertheless, discussion concerning food regulations did not cease. Analysts continued to complain about the inconsistent and ineffectual

application of the law. Food traders objected to their dependence on malevolent inspectors and their disadvantaged position in comparison to the manufacturers. Indeed, the law centered on commonplace food adulteration that did not constitute a direct health hazard. Such instances of adulteration were usually blamed on traders. As a consequence, monitoring focused on trade. Factories were even exempt. This was due to the growing influence of industry; leading manufacturers had participated in the negotiations as Members of Parliament.²⁰ A new Food and Drugs Act, adopted in 1899, slightly diminished the disadvantages for traders: a vendor charged with an offence was now able to use a manufacturer's or wholesaler's warranty or invoice as defense.²¹ In addition to this, the Local Government Board was granted the right to enforce the regulations where local authorities had failed to do so.²² Various groups of scientists, but also of economists, repeatedly argued in favor of intensified controls, and of a central institution that would advise the government and the consumers. Such an institution would also have served to establish official standards of quality for individual foods in line with the legal situation.²³ However, this request was never acted upon systematically. Legal drafts, which addressed the topic, failed to be put into practice before World War I.²⁴

In the debate around German food legislation from the 1870s onward, the English model was frequently used as a point of reference. It was repeatedly referred to by the supporters of comprehensive regulation, who, in particular, demanded an adaptation of its combination of repressive and preventive measures, and of the design of its monitoring system. There were also more critical voices to be heard. Negative experiences in England served as cautionary examples.²⁵ England thus had turned into the model of reference for a diversity of argumentative approaches. However, English regulations were not merely cited. Numerous elements of drafted versions of German food law and a number of regulations that were actually adopted were borrowed from English law. Preparatory procedures for the food laws also corresponded with the processes enacted in England. Scientific experts were systematically involved in national processes of decision making: the newly founded Imperial Health Office and an expert commission explicitly appointed for the purpose played a central role during the negotiations of the food law. However, in contrast to the English procedures, manufacturers were not involved in the process—for them a constant cause for

complaints.²⁶ As with England, the German Empire witnessed vivid discussion on the question as to whether definitions concerning individual foods should be included in the law.²⁷ It was ultimately decided that this should not be the case; such matters of specific content were left for additional decrees and jurisdiction to determine. The food law only abstractly mentioned *adulteration* and *imitation* and did not offer more precise definitions of these terms. In this, English legislation did differ from German law: since 1872, reference to “natural quality” had provided at least a vague point of orientation in English law.²⁸ The open construction of the German law was meant to guarantee flexibility. It remained subject to an ongoing discussion and was the linchpin of all further food regulation.

Discussion mainly continued because the state failed to specify the law in any satisfactory way. While the original plan had been to gradually define the concept of quality by drawing up a catalogue of decrees, this was never realized. Instead, a few special laws—for example on margarine, on wine, or on meat inspection²⁹—were passed. Many contemporaries also felt that jurisdiction—frequently criticized as patchy and inconsistent—only insufficiently met its obligations. It did not fulfill the expectations that it would specify the law in the application to individual cases and gradually establish a consensus concerning the criteria for the evaluation of individual foods. Jurisdiction became ever-more dependent on scientific experts who also failed to provide uniform standards of evaluation.³⁰ This deficiency time and again raised the question as to whether a legal settlement of standards of quality might be necessary after all. Associations of food science argued in favor of this,³¹ and economists also made repeated, emphatic calls for a precisely demarcated terminology.³² Several drafts for an amendment of the food law were drawn up. For instance, the idea of a central institution that would judge controversial cases also circulated in the German Empire.³³

Due to the federal structure of the German Empire, the problem of an unsystematic implementation of the law was even more pronounced than it had been in England. The federal states had insisted on their independence in the organization of monitoring processes. Thus the food law served merely as a framework directive, which regulated the authority of the controlling police but did not determine the exact design of the monitoring system. The establishment of control stations was left to the authority of the

federal states. As a consequence, regional habits continued to dominate the evaluation of food. Monitoring took place with varying intensity and procedures.³⁴ It was not until after the turn of the century that more and more federal states implemented systematic inspections. The number of official laboratories grew and organizational procedures gradually became more professional. However, attempts to establish uniformity, for example by setting a standard statute for the analysis centers, failed.³⁵ No effective system of food controls operating at the national level was established before World War I. In fact, legislation often did not even keep up with the ongoing developments in science and technology. As a result, non-governmental actors, as in England, became increasingly active in dealing with what they perceived to be legal loopholes: they tried to close or at least reduce the gaps with regulations of their own.

SCIENTIFIC INVOLVEMENT

Scientists played an important role, not only in the negotiation of laws but also in their implementation. In England they acted as officially appointed public analysts, in Germany as initiators of official analysis centers or operators of private, as well as municipal laboratories. Such laboratories accepted research assignments from governmental institutions and became increasingly involved in governmental control systems.

Scientists also participated in regulation processes in so far as they managed and further developed the scientific knowledge that was required for the execution of food control: numerous textbooks and manuals, compendia, and surveys were published with the objective of enabling the practitioners of food control to handle the information surfeit. They summarized the knowledge in circulation, selected, structured, and evaluated it, and thereby converted individual and frequently preliminary assumptions into collective, universal standards. This process caused at least an indirect adjustment of evaluation norms.³⁶ Scientific journals also discussed new theories and research results, and dealt with research methods, as well as with the demarcation of terminology. Application-oriented knowledge and exchange of experience were prioritized. This is documented by the regular reviews of verdicts and new legal regulations.³⁷

This internal process was closely connected to the popularization of nutritional chemistry: through middle-brow scientific publications and exhibitions that depicted scientific progress and illustrated the instruments and methodology of food monitoring, the discipline sought to present itself as a mediator of certitude in an often unstable and alienating industrialized world.³⁸ Nutritional chemists regarded themselves as “guardians of trust.”³⁹ Only food chemistry was felt to provide the tools required for the fight against rampant adulteration.⁴⁰ They sought to overcome the informational asymmetries of the food market by turning information about the nature of foods into a public good and by providing the weaker actors in the food market, the consumers, with their know-how.⁴¹

Scientific associations, such as the Freie Vereinigung Deutscher Nahrungsmittelchemiker (Free Association of German Nutritional Chemists) founded in 1882 and the English Society of Public Analysts (SPA) established in 1874, played an important role. They were not only major contributors to public debates around food quality but were also regularly involved in legislative processes.⁴² Associations participated in the diffusion and standardization of knowledge through scientific congresses and regular internal assemblies, which featured lectures on topical issues and extensive rounds of discussion. The Free Association of German Nutritional Chemists also used such meetings to provide explicit recommendations concerning preferred research methods and the interpretation of analysis results.⁴³ These quickly assumed the function of quasi-authoritative directives for fellow researchers, the economy, and consumers, as well as for administrative bodies and courts. Scientific standardization increasingly became the natural foundation of daily monitoring practice and thus regulated the scientific base of food controls. Its advantage in comparison with legal regulations was that it was characterized by continual update and adjustment. Without any conscious steering from the side of the state, scientific standardization thus specified the abstract terminology of the food law and shaped public perception of food quality. This process was continued in the 1890s when the state picked up the directives and provided them with an official framework by instituting the health office as editor of a new edition.⁴⁴ In addition to this, the standards served as a starting point in the drafting of quality standards for individual foods, which were to be carried jointly by the state, science, and the food industries. However, this

plan was aborted in its beginnings, as internal tensions and World War I prevented its realization.⁴⁵

In England, common law and de facto standards derived from public inquiries had established a certain consistence in food evaluation but the food laws were ultimately enforced on a case-by-case basis. As were their German colleagues, analysts were convinced that only minimal standards fixed by the law could prevent arbitrary court rulings and thus provide security for the consumers.⁴⁶ However, as in Germany, the scientists' agitation was only successful in some areas and when their goals coincided with the objectives of other interest groups. This is documented by the first specified standards that resulted from a pooling of public and private interests: the Sale of Milk Regulation of 1901 and the Sale of Butter Regulation of 1902. Like the German margarine laws of 1887 and 1897, they were mainly aimed at protecting agricultural butter producers from the competition of margarine. They provided, with the force of law, those de facto standards that were already being used by analysts, government laboratories, and courts and that were acceptable to the agricultural associations and leading milk producers. These regulations ultimately resulted in the Butter and Margarine Act of 1907. Other detailed guidelines were drawn up in direct response to business pressure.⁴⁷

The SPA's struggle for universal food standards was finally supported by the so-called reform associations who were committed to the improvement of food quality as part of a larger campaign for a healthy lifestyle. The National Pure Food Association (later the National Society for the Prevention of Adulteration and Sophistication, also known as the Pure Food and Health Society) did not merely host lectures and conferences on food quality: in 1913, the association presented its own legal draft in which it promoted general food standards and a court of reference, and demanded a separate, new governmental department of public health. The association succeeded in attracting wide public attention and in 1913–1914 evidently initiated two legal drafts. The laws were intended to enable the Local Government Board to establish definitions of foods, and proposed a central advisory tribunal that was meant to consist of members of the Local Government Board, the SPA, and the food industry. Both laws remained unratified; as in Germany, official food standards or a central instance to settle questions of definition still remained unattainable goals at the time.⁴⁸



FIGURE 3.1: Municipal laboratories sprang up in Europe and North America after 1875 to guarantee food safety. Just as urban residents elsewhere, Parisians worried about the purity of milk. (Source: *L'actualité*, January 26, 1902)

The Sale of Food and Drugs Act of 1875 first called on the Inland Revenue Laboratory at Somerset House in London to function as a kind of reference court for the monitoring process. However, this effectively weakened the position of the analysts. It also caused even greater confusion concerning evaluation standards, since positions expressed by the laboratory frequently deviated from those of the analysts and worked to the advantage of the industry. This caused lengthy controversies on the evaluation of individual foods. Disputes only abated when the Inland Revenue Laboratory was united with the Board of Customs and converted

into the newly staffed Government Laboratory. However, the generally competitive situation apparently persisted.⁴⁹ Even the establishment of the Foods' Section of the Local Government Board in 1905 did not satisfy hopes; it carried out numerous examinations on foods and proposed standards for specific products but ultimately continued to act on a case-by-case basis.⁵⁰

Public analysts in England were facing stronger competition from within their own ranks than their colleagues in Germany. Even before professional associations were established in England and also in Germany, so-called anti-adulteration associations had been founded. These associations did not merely participate in public discussion on food regulations and educate consumers with publications and lectures. They also carried out their own controls and ran laboratories. These associations, in which scientists had the greatest say, were merely active for a short time and were ultimately superseded by the professionalized associations in both countries.⁵¹ However, in England new media entered the scene that carried on the campaign of anti-adulteration, such as the journal *Food, Drugs and Drink*. This journal represented the interests of the sellers of pure products rather than those of the public analysts, even though it was also invested in the campaign for a central commission.⁵² The *British Food Journal and Analytical Review* was one competitor of the SPA-journal the *Analysts* that was also structured in a similar fashion. It aimed to establish a comprehensive system of quality control backed by the industry that would certify pure products on the basis of approved conditions. This institution of arbitration, called The British Analytical Control, was meant to act as an independent authority with the objective of convincing producers, traders, and consumers of their shared interest in high-quality products. Producers would be able to voluntarily subject their wares to regular quality control checks and could then use this as an advertisement for their responsible business policy. However, the facility was met merely with faint responses.⁵³

THE FOOD INDUSTRY

The food industry was frequently attacked in the discussions around food quality. Producers and traders faced allegations of engaging in regular intentional fraud and methodical manipulation, and of providing the consumers merely with insufficient information. Both producers and traders

dismissed these allegations as slanderous and defended methods of production that were depicted as questionable.⁵⁴

However, they could not avoid acknowledging how severely confidence in food quality had been shaken. They had to find ways and means to reinvigorate dated mechanisms of securing consumer confidence and to complement them with new institutions. This was the point at which advertising strategies in the food industry began to take off. The use of advertising campaigns, in which consumers were to be convinced of the quality of industrially manufactured products and of the fact that these products were comparable to homemade foods, was a first step.⁵⁵ These promises were connected to rational arguments; the main aim was to transmit plain information—with the objective of traversing, at least seemingly, the information gap between consumer and manufacturer. Objective appraisal authorities were appointed as “guardians of trust”⁵⁶ who should prove the high quality of the advertised product. Awards and badges referring to competitions and exhibitions were cited.⁵⁷ In keeping with the growing influence of food chemistry on the evaluation of food quality, chemical expert appraisals were displayed in print, especially in the case of newly developed products.⁵⁸

A growing number of food producers—in particular large-scale manufacturers of confectionery, canned goods, and medical foods—regularly cooperated with private, but also with municipal and state-owned laboratories. In Germany from the 1880s and in England from the 1890s, companies employed chemists on a regular basis and set up their own laboratories in charge of quality assurance. In Germany, these laboratories were frequently involved in the development of new products and manufacturing processes; in some cases even the fundamental research was supplied by the chemists on staff, some of whom also distinguished themselves with scientific publications and apparently were well-respected authorities in the scientific community.⁵⁹ In the English food industry, scientists only gradually came to participate in the conception of new production methods. Here it also was not until the 1920s that the reception of nutritional sciences began and company chemists became actively involved in discourses of scientific research.⁶⁰

The identification of a product with a certain company became a central goal of advertising. This endeavor found its most effective realization in the establishment of brand-named articles: foods, along with cosmetics and products of the chemical and pharmaceutical industry, were among the

first branded products.⁶¹ Prominent early examples in England were Oxo, Rowntree, and Bovril as well as Colman's, in Germany Stollwerck, Liebig's *Fleischextrakt*, Kathrein's *Malzkaffee*, as well as Dr. Oetker. In these cases, the branded article offered the opportunity to distinguish itself from the multitude of competing, frequently very similar, and unverifiable products. Brands were meant to provide consumers with guidelines for a market that was growing ever-more confusing and more anonymous, and which was expanding steadily. They were supposed to relieve the consumer of the necessity of checking the quality and quantity of goods. The brand acted as a substitute for the personal contact between producer and customer. As a proof of production, it stood for the seller's promise of quality. Correspondingly, brands were usually connected with a long-term policy of quality assurance—the good reputation of a brand was to be defended incessantly and could have been easily endangered by a marked lapse in quality.⁶²

In addition to such measures of quality regulation, a number of associations in the German food industry stipulated explicit standards of quality. In 1905, for instance, the recently founded Bund Deutscher Nahrungsmittel-Fabrikanten und -Händler (Union of German Manufacturers and Traders of Food) published the *German Food Book*, which aimed to provide both guidelines for traders, and directives for jurisdiction and monitoring bodies. In terms of content and structure, these standards did not differ greatly from scientific standardizations, even though they were meant to oppose precisely those: here as well, the main objective was to specify the vague legal terminology of the food law by proposing limits and defining features. Even if the configurations of characteristics frequently deviated from scientific standards, at least in some case they had been directly adapted. The *German Food-Book* was designed to be subject to constant revision and expansion in order to remain responsive to innovation—qualities that state regulations were felt to lack.⁶³

Apart from the overarching *German Food Book*, individual sectors of trade approved their own standards. One notable example was the Vereinigung Deutscher Schokolade-Fabrikanten (Association of German Chocolate Producers), who realized that the general rise in purchasing power was gradually leading to a growing demand for high-grade goods. The dissociation from adulterated chocolates was increasingly seen as a sales' opportunity—in particular since the German chocolate industry occupied

a disadvantaged position on the global market due to German customs regulations and many German manufacturers tried to assure the competitiveness of their products by substituting expensive ingredients. A catalogue of additives and ingredients, which were forbidden or had to be declared, had already been drafted. Association badges were one of the most important instruments of the associations' policy. They turned into a feature of identification for the associated companies and made self-imposed obligations immediately visible to the outside. By regular analyses, the *badge-worthiness* of labeled goods was monitored; a graduated system of sanctions was in place to handle transgressions.⁶⁴

Obligations with regard to quality turned into an instrument of competition—a development that could also be observed in England. The English food industry enjoyed a greater influence on legislation than the food industry in the German Empire. As a consequence, it did not aspire to standards of its own. Instead, companies frequently aimed to channel state regulations according to their own interests; for instance, brewers who made vinegar through a process of fermentation demanded that the less-expensive rival products be labeled as either imitation or artificial vinegar.⁶⁵

INTERNATIONAL RELATIONS

The indebtedness of German food legislation to the English model shows that inspiration from other countries played an important role in the processes of decision making concerning food regulations. However, this was not a one-sided German phenomenon: during the 1870s, a vivid informal exchange between several emerging industrial states developed as a consequence of them all facing similar problems in the context of food monitoring.⁶⁶ The regulations of other states worked as a challenge and an incentive. This is demonstrated, for instance, by inter-state conflicts that dealt with evaluation standards for imported foods.⁶⁷ Experiences of other countries helped to assess whether theoretical conceptions would prove realizable. This was particularly vital whenever fundamentally new systems and institutions were to be established.⁶⁸ Structural similarities in the development of food monitoring attested to a lively exchange between countries. Such similarities were not only visible in laws but also, for instance, in the establishment of public slaughterhouses that was taking place all over Europe.⁶⁹

Such transfer of information frequently was not achieved through diplomatic channels. Instead, experts established networks that became major means of contact across state boundaries. Even concrete endeavors for an international harmonization of food legislation initially took place only at this semi-official level. The scientists did not merely engage in the mutual reception of their scientific publications but increasingly sought direct exchange at a growing number of international conferences from the 1850s onward. Some conferences offered separate panels dealing with the legal situation of the involved states in which different models were compared.⁷⁰ Journals constituted another forum; examples were the *British Food Journal* previously mentioned and the *Annals of the White-Cross-Society*, which received contributions from correspondents in different countries.⁷¹

It was also in these circles that the idea took hold to institute internationally uniform guidelines for the organization of food monitoring, as well as for the analysis and evaluation of food. Such considerations usually did not move beyond theoretical discussion⁷² but there were two instances when attempts at realization became rather concrete: in 1894, the biannual International Conference of Applied Chemistry appointed an internal commission that was to prepare an international food-book. A first draft that was presented in 1906 was based on several scientific and official sets of regulations originating from different countries.⁷³ This catalogue of regulations had to receive official legitimation in order to be more than mere waste paper. Thus, the assembly called on the governments in question to authorize the commission to draw up an official international codex based on the draft. In the future, this codex should constitute the sole normative foundation for methods of analysis and evaluation criteria in all of the states that were to join the agreement.⁷⁴ However, even scientists felt that it was too early for such an endeavor since scientific methods, manufacturing procedures, and types of goods in the individual states differed to a great extent. Only extremely general and thus practically ineffective regulations would have been able to take into account all national particulars. The reactions of the governments were similarly skeptical. Following this, only non-committal, preparational works were carried through, and even these were suspended with the onset of war in 1914.⁷⁵

The endeavors of the International Congress for the Inhibition of Adulteration of Foods and Pharmaceutical Products, hosted annually by the

White Cross since 1908, proceeded in a similar way. The congress was also meant to propose international standards of evaluation. However, traders were invited in addition to scientists, practitioners of food monitoring, and governmental representatives. At first, the positions of each individual interest group were determined separately. In a second step, guidelines for a joint standard should have been formulated on this basis. This second stage was never reached; once again, World War I put an end to negotiations.⁷⁶

However, the war was not the only major obstacle to the creation of standards that would be valid across boundaries. Conceptual thinking was still too restricted to national dimensions, and frequently, reluctance to even out differences, and thus give up national particularities prevailed. Differing traditions of science and law influenced the conceptions of an ideal regulation and led to controversies of content—despite the fact that one's own legislation had often been inspired by foreign models. Competitive thinking created additional problems: the fear of disadvantages in international trade completely hindered candid debate and ultimately prevented concrete negotiations. Furthermore, efforts to reach agreements simply started too late: as early as in the 1890s, a harmonization in the railway industry and the postal system, as well as in the legislation on exchange, trade, insurance, and pharmaceuticals had been completed, or had at least advanced to a great degree.⁷⁷ In the field of food regulations, such developments were merely in their early stages, since individual states were still struggling to get a handle on the problem at the national level. Thus, the war nipped incipient stages of international harmonization in the bud.

CONCLUSION

In the second half of the nineteenth century, socioeconomic processes related to industrialization lead to increased attention being paid to food quality in many states. Not only were discussions on the alleged rise in adulterations frequently similar, the manner in which to handle growing insecurities concerning commercialized food supply was also consistent: states regularly responded with a reform and expansion of food monitoring. The comparison between England and Germany shows that emerging industrial countries were facing very similar problems—scientific and technological progress not only affected food production and led to an introduction of new

products to the market, but also changed the standards of evaluation. In both countries, the influence of scientific expertise on processes of decision making increased as a consequence. The state could no longer provide the knowledge base required to deal with the increasing complexity of the matters subjected to regulation. It thus had to revert to external knowledge that was also used to legitimize the decisions that were ultimately made. The design of the laws was also affected by the changes: legal mechanisms were established so that regulations remained flexible and adaptable. Both in England and in the German Empire, concrete cases remained intentionally unresolved by legislation and were left to jurisdiction and complementary regulations. In both states, the implementation of this model created difficulties, which were dealt with in similar ways: through an increasingly systematized exchange of knowledge, scientists attempted to create a shared basis for food evaluation. At the same time, the industry employed specific advertising strategies in order to dismantle public insecurities. Interest groups were gaining influence and demanded official standards, which were to complement the law, and/or central authorities that were to decide on controversial cases. In the German Empire, scientific associations were drawing up internal standards for food evaluation that increasingly came to be used as the foundation for official food controls. In England, informal and scattered standards of evaluation persisted, except in the case of some specific products. The activities of interest groups were also more strongly directed at the state. This was probably due to the fact that, despite its weaknesses, the English monitoring system worked more effectively than its German equivalent, and the interaction between state, industry, and science was better attuned. However, both states employed a model of regulation that, at least in part, depended on a division of labor: the state defined minimal standards for hazard prevention that nutritional chemists specified and monitored. The food trade then supplemented the minimal standards provided by the state and by science with standards and demarcations of quality of its own. Law settled by the parliament was complemented by non-juridical, normative systems that were established through social self-organization. Despite some decided differences in approach and motivation, all standardizations ultimately aimed to restore public confidence in food quality. This confidence had been shaken by growing informational

asymmetries that had gained prominence in public awareness. Trust had to be regained in order to procure an operative food market.

Similar structures were visible in other countries: in the beginning of the twentieth century, most industrial countries had special laws dealing with the regulation of food. Some of these went further than laws in the German Empire and in England, and featured precise descriptions of terminology or legal definitions.⁷⁸ However, even here state law was often complemented by the involvement of scientific and economic interest groups. In Austria, for instance, a *Codex alimentarius Austriacus* was published in 1911.⁷⁹ This codex was the result of the cooperation of scientists, administrators, judges, and traders and proposed criteria for the evaluation of individual foods, but it was not provided with the status of a legally binding directive. In contrast to this, Switzerland established the *Swiss Food-Book* as legally binding in 1909. This collection of analytical methods and evaluation directives had been prepared by the Swiss Association of Analytical Chemists and could be adapted to scientific, technological, and economic developments through resolutions of the federal council.⁸⁰ Parallel to the 1906 Pure Food and Drugs Act, even the USA set official definitions for foods: the Standards of Purity for Food Products, established by the Department of Agriculture and the Interstate Food Commission.⁸¹

Even if regulation models were ultimately very similar, individual products were often evaluated very differently in different countries. This was, among other things, due to the diverse traditions of manufacturing and differing nutritional habits, as well as the variable access to resources. The problem was accentuated in a time of ever-expanding flows of trade. Paying tribute to this fact, in particular, those scientists who were already internationally interlinked tried to establish internationally uniform criteria for the evaluation of food. What was initially prevented by the world wars has been taken up again in the past decades. The problem of the evaluation of wares originating from radically diverse countries is today more pressing than ever. Thus, parallels cannot only be detected in the debates on food quality and in the regulation processes of individual states in the past; debates in the present display a remarkable degree of similarity to those of the late nineteenth century. Inevitably, informational asymmetries between manufacturers and consumers continue to exist, and changes in technology

and science have further accelerated. In a long-winded process, involved actors have gradually assumed clear positions in the complex field of interests and have together established a set of institutions of food regulation. Nevertheless, the details of their design continue to be subject to debate—usually when new scandals challenge the functionality of the mechanisms of consumer protection that are built to instill confidence. Thus, a process of discussion and negotiation was initiated during the time of industrialization that persists to the present day.

CHAPTER FOUR

Food and Politics: Policing the Street, Regulating the Market

MARTIN BRUEGEL

The public consumption and distribution of food have, since time immemorial, contributed to the dramatization of power and wealth. The nineteenth century continued such displays, and added a new twist. Ceremonial feasts had long served as a symbolic weapon in the fabrication of images that aimed at upholding the political status quo. Now they helped contest traditional hierarchies. Opponents to the monarchy organized a campaign of banquets throughout France in the 1840s. Shared meals conveyed their attachment to the republican ideals of liberty, equality, and fraternity. Civic commensality—the act of eating together as citizens in the making—expressed their disapproval of the regime’s hierarchical values. German revolutionaries seized on the example and organized similar festivities in March 1848. The foundation of the Third French Republic in 1871 ensured that banquets of the country’s mayors became a standard ceremony by which the democratic polity represented—and celebrated—itsself.¹ Such civic feasts, as the newly founded British *Food Journal* dubbed the London Lord Mayor’s dinner of 1871, staged community. The profusion of delicate

dishes and fine beverages asserted the sense of social belonging and demonstrated the material benefits of membership.²

The integrative capacity of meals ought not to dissimulate that they are predicated on exclusion. Resources are always scarce, places limited. In the nineteenth century just as today, insiders participated while outsiders looked on from the stands, or as readers of the printed media. Some among them gobbled up the crumbs: the 700 covers for the Lord Mayor's dinner had the reporter wonder about the political and patronage uses to which "the immense quantity of remnants" were put. While partaking obliged participants, public banquets nevertheless became places of contestation and symbolic violence. The scandal of such events began hitting home after the representatives of the Social-Democratic Party had refused to sit down and cheer at a dinner held in Konstanz in 1909 to honor the accomplishments of Graf Zeppelin and the incipient German aircraft industry; they construed the widely publicized event as a ploy to show off the superiority of the imperial regime that they so despised (some twenty years earlier, the American traveller Lee Meriwether had noticed that political boldness was making progress in Germany, so "lovers of Democratic governments and of freedom have cause to be hopeful").³ While the absence of women in officially approved republican banquets in France and in the deputations of feasters and dissenters on the shores of the Bodensee seemed not to have raised many a contemporary's eyebrows before World War I, the examples illustrate that citizenship and a stake in power were the privilege of men, even in the minds of revolutionaries. For women, they were a battle yet to be won.

Politics is about conflict, and controversy and disputes take place even more forcefully with respect to food—a resource of physical and metaphorical import. The symbolic mobilization of food rests on its capacity to signify social boundaries and pecking orders (meals can also feature their share of sadism and oppression). Instances when access to real sustenance is the issue exacerbate this singularity. Hunger dehumanizes, and while peacetime famines became exceptional but remained exceptionally dreadful in the nineteenth century (during the Potato famine in Ireland, of 8 million inhabitants on its eve, 1 million died and 1 million emigrated), living on the edge of starvation was still not exceptional.⁴ Every now and then, only the renewed availability of enough food restores human dignity. Nineteenth-century politicians and philosophers discussed the merits of markets to alleviate food shortages and ensure sufficient supplies. Private charity



FIGURE 4.1: Food as an integrative force at a Mayors' banquet in France 1889. A hearty—and accurately all male—celebration of the Republic. (Source: *Le Petit Parisien*, August 25, 1889)

persisted, and cooperative self-help emerged as the means with which to fight want. Such attempts to overcome scarcity relied on social forces capable of organizing themselves. They did not eliminate state intervention. On the contrary, the continued eruption of food riots tested a regime's ability and willingness to act on the spot (as it were): either to find provisions, most notably for urban populations, or to repress unruly behavior. Then, too, rather more tectonic shifts such as the industrialization of food production, the expansion of international trade, scientific innovations, and rising standards of hygiene threw new demands at public authorities. The smooth operation of food markets and changed expectations of what it meant to lead decent lives required coordination and supervision. Shared national and international definitions of food quality proved to be one of the devices to provide stability and trust—and perhaps sustain economic growth—in the long run. Their construction was the result of political negotiations.

Men, women, and children were actors when it came to rioting in small-scale settings. Lobbies staffed by men turned into prime movers in the policing of commercial relations, near and far. This bifurcation of engagements suggests the creation of a new dimension in food politics. On the one hand, it contributed to the removal of the more violent aspects from public life. On the other hand, it enhanced opacity in decision making now often inflected by pressure groups. To be sure, the persistence of food riots indicates that pacification had its limits; the integration of formerly disenfranchised popular classes—and, in their midst, of course, women—and their participation in policy making was an on-going, incomplete process.⁵ But debates on ways to legislate food, its quality, production, as well as commercialization, and the inclusion of food into policy arguments, helped move the focus away from grassroots politics and, if you will, local authorities, to what seemed more technical issues and onto national political agendas.⁶ Health issues were also debated: the media, particularly the muck-raking press, relayed the emerging scientific consensus on the effects of adulterated foods on the physical condition of men and animals. Beyond the cost that food adulteration inflicted on the economy and the state, whose revenues it reduced, hygienists defined tainted and contaminated food as a social problem. Conventional wisdom on the liberal nineteenth century notwithstanding, the regulation of food markets and trade became a compelling political issue in Europe and North America. Its national solutions are variations on a theme. They still define the frame within which most countries—and now international organizations—attempt to master issues of food safety and security.

STREET POLITICS

The heat was on in early 1817. Times had been hard in the department of the Seine-Inférieure (Normandy) since the final years of the Napoleonic Empire. Misery was widespread, discontent high. The combination of imperial wars, the effects of the naval blockade enacted as part of the continental system, occupation, the exhaustion of grain reserves after a series of mediocre harvests, and now an industrial downturn that reduced incomes to purchase ever-more expensive foods produced an explosive mixture. And indeed, at least sixty incidents of food rioting occurred that spring in

the environs of Rouen.⁷ All the nodal points in the supply and transformation chain of grain became targets of popular action. Crowds, sometimes a thousand strong, stormed urban granaries and then proceeded to distribute their stores. Millers and bakers were forced to sell flour and bread at the *just price*. In the countryside, people stopped convoys that transported flour and corn on roads and rivers to areas which they feared lay beyond their district's confines—to Picardie, for example, to Paris inevitably, and even to Ireland, as rumors had it. In popular perception, local needs were to prevail over opportunities to make profits elsewhere. Government had the duty to ensure a sufficient food supply. With authorities standing by while dearth struck, it fell to the people to take things into their own hands.

A hundred years later, the price of bread was still a contentious issue in France. Yet now, discontent and riots over the high cost of living targeted other foodstuffs, too: meat, for one, but also wine, dairy products, and eggs.⁸ Protest, popular price fixing, blockades, and forced sales, free distribution, and pillaging remained the means for street politics throughout the century. As in 1817, some protests spilled over into physical violence. And yet, such continuity in the pattern of food riots must not conceal an important feature that had changed: the *vie chère* turmoil hints at the widening of the popular definition of a decent food supply in France.

Public officials resorted to a wide repertoire to respond to unrest. Proximity to the aggrieved population influenced the severity of their reaction. In 1817, the mayor of the small town of Cany described the prolonged distress that pushed “the people” to assemble in front of the town’s warehouse, where they implored the administrators to provide grain at a reasonable rate: “there was no looting and plundering, the people held the money in their hands and paid for the flour bags which they shared. No coercion is justified against an entire population that hunger pushes to despair. They’d gladly go to prison so as to be fed.” Other mayors were less compassionate and called in the National Guard. And the higher the clerical rank, the harsher the crack-down. The region’s head, appointed by the central administration in Paris, approved the use of mounted police to break up what he construed as unlawful mobs. Legal prosecution was standard: authorities did refrain from executing participants as their imperial predecessors had done in the spring of 1812 when capital punishment was meted out

to deter further upheaval in nearby Caen, a city with a long tradition in food rioting. Men and women, almost all locals who engaged in gainful activities as artisans and workers, fishermen, shepherds, and agricultural laborers, found themselves condemned to forced labor, prison terms, and life under police surveillance.⁹ In 1912, the government rehearsed the same medley of reactions: price negotiations, emergency relief, *manu militari* repression, trials, and imprisonment.¹⁰ In short, empathy remained tied to propinquity. While national authorities increasingly favored the state's disengagement from satisfying economic demand and supplying basic needs, their policies at times betrayed a penchant for the correction of market liberalism; on the local level, municipalities hung on to traditional notions of regulation that included price setting, close supervision of bakers and butchers, and the maintenance of open markets to prevent private deal making and the dissimulation of goods.¹¹

Food riots were—still are—ubiquitous, recurring, and rather circumscribed events.¹² As in earlier centuries, they continued to flare up in times of crises through World War I. They highlighted the importance of rice, wheat, and millet in China, India, Japan, and Sri Lanka.¹³ They rocked European countries from Scotland and England, to Switzerland and Spain, Germany and Italy where a steep rise in wheat prices often triggered popular action.¹⁴ A so-called red week of rioting in 1905 mobilized Chileans, who defended their right to eat beef as a means to maintain physical strength, when price hikes of other commodities—wheat, beans, and potatoes—prompted a reduction in the consumption of meat. Germany saw beer revolts in the 1870s, and the high price of meat led to rioting in Berlin on the eve of World War I.¹⁵ Wars inflicted hardship and spurred crowds to take to the streets where they could express their anger: from the American Revolution, during which people fought for access to foodstuffs ranging from bread to sugar and tea,¹⁶ to shortages during World War I in which discontent and upheavals throughout Europe were widespread.¹⁷

Most rioting hardly ever exceeded a month in duration. The timing of these events varied. Shoulder seasons, such as spring in Europe, predominated because grain reserves tended to disappear, but international conflicts and the larger repertoire of bare necessities disconnected unrest from their traditional seasonality. Yet whatever their proximate origin (harvest failure, industrial downturn and unemployment, war), food rioters accused

LA MISÈRE EN ITALIE



LE PILLAGE D'UNE BOULANGERIE EN SICILE

FIGURE 4.2: The attack of a bakery in Sicily in 1898 after the government had refused to weigh in on prices. Note the participation of women and children. (Source: *Le Petit Parisien*, March 6, 1898)

authorities of neglecting their time-honored responsibility of providing sufficient supplies. This was the social contract of food security.¹⁸ Peace on the streets rested with its implementation. Popular discontent congealed with the perception of governmental failure to abide by such communal conventions. Collective action aimed to restore the foundation on which the public order rested. Food rioting was not merely an unthinking reaction to menacing hunger. It was a form of politics.¹⁹ People surviving on the edge of misery wielded their power. They descended onto the streets when high prices or lack of supplies threatened their access to daily subsistence. As angry consumers they reminded authorities that the government's legitimacy stood and fell with adequate provisioning of food markets.

Utter indigence does not predispose to uprisings. The lack of energy among the destitute has them depend on private or public charity. The kindness of neighbors functioned everywhere. Ad-hoc distributions of "Soup for the Poor" took place in the Hudson Valley during the economic disruptions in 1817 and 1837. Whenever hardship hit in cities, private associations most everywhere distributed cash and food. The involvement of churches and religious orders in philanthropic undertakings surely underscores the role of Christian compassion as an inspiration of such benevolence. And yet, fear of property destruction and public abuse at the hands of angry crowds added to such civic motivation among the propertied classes. Landlords, bakers, butchers, shopkeepers of many kinds, and especially flour merchants figured prominently among the targets of popular wrath. The reputation of commercial middlemen had always suffered from suspicions of hoarding, speculation, and dishonesty in trade. Dearth triggered attacks to shame and punish offenders of traditional notions of equitable access to food: they had behaved immorally and needed correction. Private philanthropy at least showed that local elites in Austria, China, France, Spain, Sri Lanka, or Switzerland were not indifferent to the suffering around them. The symbolic aspect weighed in just as heavily as the actual material relief.²⁰

Alms humiliate, however, and anyway, private donations hardly ever suffice to put the starving back on their feet. To eschew the stigma attached to free handouts and avert long-term expenses by fixing the indigent in subordination on the receiving end of welfare payments, public authorities imposed price and export controls. Some effected the importation of

foods. In 1912, the city government of Berlin imported meat slaughtered in Warsaw to ease access in a period of sustained price hikes on the eve of World War I (the consumer riot came in spite of the effort).²¹ The favored measure was to mount employment projects to provide incomes with which to buy foodstuffs in Belgium, as well as in Prussia, Italy, and France. To feed the starving and calm the angry were the twin goals of such relief programs. They probably reached their peak in the years surrounding the Revolution of 1848 when Paris brimmed with public construction sites for a few months and Berlin apparently provided some kind of food aid to one-third of its inhabitants. Yet even without revolutionary convulsions in sight, Ireland's government opted for public works in the early stages of the Great Potato Famine, providing employment for one-in-twelve inhabitants. (Other possible policies—food imports, for example—were half-hearted, and often drowned in cacophony; what remains is the memory of inefficiency and imperiousness.) It is, of course, hard to assess the success of these efforts, though they had a countercyclical effect on the economy. However, the will to institutionalize public poor relief lacked even when governments were not overthrown, and so programs were rather short-lived.²²

The pattern and nature of rioting, as well as its persistence in the nineteenth century, suggest that the widespread belief in the entitlement to an adequate food supply evolved in some independence from other large-scale developments. The rationalization of conflict certainly received a boost from ever-more forceful organizations, among which, most importantly, trade unions and professional associations took the lead.²³ However, their existence did not do away with the older, normative universe of the moral economy. These notions again informed popular behavior when push came to shove and all the more so in the face of weakening central authorities incapable of policing the grain supply, as in China or Spain.²⁴ Conversely, exemplary repression at the turn of the nineteenth century put an early end to food rioting in England. The state's heavy hand found its justification in an implacable invisible-hand ideology. Unlike their continental counterparts, the British elite stuck to free-market liberalism even in the face of tremendous hardship, to the point of refusing imperial means and monies for relief campaigns when famines struck in India, contributing to an unfathomable number of deaths from starvation and related diseases.²⁵ Street politics—and the notion of an administration's responsibility for adequate food provisioning—persisted in

France and Germany; their elites consequently handled the idea of removing the state from economic affairs more pragmatically.

THE HYGIENIST MOMENT AND THE POLITICS OF FOOD SAFETY

Turmoil in the streets was, of course, the most spectacular, if intermittent manifestation of food politics in the nineteenth century. However, food supplies always raised twin issues. While their security obsessed rulers and the ruled, food safety was never far from their minds.²⁶ By the mid-nineteenth century, scientists concerned with workers' living conditions intensified their inquiries into the means of correcting the consequences of the Industrial Revolution. While the origins of the movement reached farther back to the lowering of tolerance for foul smells that came to be identified as (miasmatic) carriers of sickness,²⁷ the consequences of industrial and urban development heightened philanthropic distress and social fear. Reporters and physicians set out to document the squalor in which working families evolved. Such investigative writing found the cause for deleterious situations in the low-income groups as well as the moral shortcomings of industrial workers. The element of realism did not inoculate against condescension toward the ill-fed and ill-housed. It would, however, help in the search for, and eventual emergence of, collective solutions to the plights that economic growth inflicted, in unequal doses, on the members of industrializing societies. While their completion required political will and compromise, and was far from being achieved at the outbreak of World War I, a widely shared consensus on desirable public action had by then emerged among scientists. The free-market *Journal des économistes* nevertheless took aims and ways for granted in 1905 as it looked back on fifty years of hygienist momentum: "it is strange to have to repeat that the most efficient means to maintain and preserve health and life is access to sufficient, nourishing food, a salubrious home, pure air, clean water, solid clothing, light and, as much as possible, exposure to the sun...this is intelligent welfare and serious prophylaxis."²⁸ However, the answer to the question about who should foot the bill for these improvements in public-health systems divided public as well as expert opinion, and financial considerations would constrain their scope.

Whatever their ideological inclinations or whoever was their paymaster, hygienists formulated down-to-earth, hard-edged arguments to justify their battle against dreadful sanitary conditions and contaminated food supplies. Inquiries now relied on on-site observation, laboratory science, and comparison; for example, Arthur Hill Hassall (1817–1894), physician and the author of the momentous feuilleton on food adulteration published in the *Lancet* in the early 1850s, elevated the microscope to the primary instrument of inspection. Scientists endeavored to propose practical solutions to sanitary problems. Prevention, hygienists sustained, was cheaper than reparation in the long run, and the improvement of public health was to have a positive effect on the economy as a whole. Bacteriological knowledge provided the theoretical system to justify investment in public utilities as well as waste disposal. By 1855, physician John Snow (1813–1858) had established a link between sewage-polluted fountains and the spread of cholera in London, but waterworks and canalizations began to be built before Louis Pasteur (1822–1895) and Robert Koch (1843–1910) had made their epochal discoveries. Next to water (a subject on which most hygienists had spent some time), other carriers of disease caught their attention: the lack of sanitary standards in manufacturing in general, but in food production, transport, distribution, and conservation in particular. Here, too, the hygienist claim went beyond philanthropy. Poor and adulterated food contributed to debilitate people, physically and mentally. It was also bad from a commercial point of view, since the loss of reputation could put a nation's economic future in jeopardy.

The case carried weight and moved authorities to muster political will and promote investment in new infrastructures. It also sustained curricular innovation at universities where organic chemistry and even food chemistry began to be taught in order to educate the personnel to staff public and private laboratories. In time, and after quite some struggle for recognition, specialized professionals replaced pharmacists and physicians who had hitherto analyzed foodstuffs. While England was the vanguard for public hygiene (and where public analysts would go on to distinguished service), Germany's universities attracted a great many aspiring chemists who would head laboratories and experimental research stations back home in Finland, or the United States, or elsewhere.²⁹ Analyses were local matters, and parochial jealousy sometimes slowed the establishment of laboratories.

Overall, however, hygienists favored legal mechanisms to put a stop to injurious practices on a national scale. Thus, medical associations, government officials, as well as consumer associations joined in the promotion of food regulation, and the ultimately reached regulatory compromise reflected the relative strength of these groups.³⁰

IN SEARCH OF ORDER

The history of crises and expansion in the twentieth century has stimulated a discussion in economics on the pros and cons of the regulation of markets in general, and food markets in particular. Two positions mark out the intellectual territory.³¹ On the one side, the argument sustains that food-quality regulation advances the interests of specific producers who capture it and then seek to harvest payments from their privileged position in the market. On the other side, consumer protection and adequate institutional frameworks to prevent the subversion of property rights emerge as the main driver of regulation. The arguments clash over the need of third-party intervention beyond market forces and producer self-interests to avoid market failures and achieve efficient economies.³² Historians, especially those working on the years of almost frantic law-making and social reform during the Progressive Period of the United States (1880–1920), stake out similar positions with respect to the Meat Inspection Act of 1891 and the Sherman Antitrust Act of 1890, as well as the Pure Food and Drug Act of 1906: regulation as a lobbyists' tool on the one hand, as consumer protection, on the other.³³ All these interpretations credit journalism with a role in pushing issues of food safety onto the legislative agenda. Such reporting appears to have sustained the contemporary perception of impending chaos among elites, who thus sought to impose order and stability in food markets through legally enforced standards of product safety (politicians tried to satisfy—and retain—their voters). National pure food—and sometimes drug—laws (for example, United Kingdom 1860 and 1875, Germany 1879, Belgium 1890, Austria 1897, France 1905, Switzerland 1905 and 1909, the United States 1906, Spain 1908, and so on, down to Yugoslavia 1930, and Norway 1933) were meant to provide them.³⁴

In Europe and the Americas, the growth of production capabilities (including, for example, the use of margarine in butter production, or

saccharin in brewing, or more generally, the integration of synthetic ingredients in hitherto *natural* goods), the expansion of trade, and sharpened competition had increased the instances where fraudulent behavior could take place and alter a product. The “lust for lucre” in general, but cut-throat rivalry between mushrooming, unregulated retailers in particular, appeared to many observers as the main drivers of fraud. However, they also augmented the number of product varieties, and so undermined product definitions. With conventions on shaky ground, monitoring costs rose. As a consequence, business suffered, its profits slumped, and hence, its lobbies’ active promotion or—depending on the interpretation—appreciative welcome of national regulation (which, in the United States, superseded the laws of the states) came into being.³⁵ Consumers were to profit from product labels to make informed choices. Whatever the original impulse, such laws were about the restoration of solid bases for doing business. When it came to food safety and consumer protection, they set a minimum benchmark for food safety in order to banish unfit products, the consumption of which had proved to be a health hazard. But over and above all else, the laws were devised to ensure the circulation of product information. They provided the frame within which to institute norms and formulate definitions, and the rules to publicize them in order to avoid information asymmetries during transactions. Their violation amounted to commercial fraud and incurred legal sanctions.

The national outcome was by no means an open-and-shut case. The legislative process took its time, however much scandals—such as the conditions of meat packing in Chicago revealed in Upton Sinclair’s *The Jungle* (1906)—may have provided a jolt to lawmakers. In general, though, food quality seemed to have preoccupied some elites and reporters; it troubled consumers much less. Historian John Burnett speculates that poorer households in the United Kingdom either did not know better or could not afford to make do differently; there are even instances, it seems, where public taste went to punched-up but attractively glazed green tea leaves, chalk-laced but white rather than off-white colored milk, copper-sulphated, powerfully green rather than somewhat pale peas, or salicylate-stabilized beer. In Germany, chemist Joseph König (1843–1930) surmised in the 1870s that “it is consumer indifference to issues of food quality that permits sloppiness among producers and distributors.”³⁶

Even so, the adoption of national laws should not suggest that they arrived in a legal vacuum. No hiatus characterized the passage from an obsessively regulatory ancien régime to a laissez-faire state in which business was left alone as a private affair.³⁷ Trade regulations—price controls and guild rules—may have been dismantled, sometimes earlier, sometimes later (the abolition of regulations for Parisian bakeries in 1863 immediately brought an outcry over a supposed increase in occurrences of fraud). However, even in precocious England, Frederick Accum’s list of entrepreneurs convicted of fraud in the immediate years before 1820 stands as evidence of continued state intervention in the economy. Commercial matters fell within the purview of civil and penal codes. Litigation ideally remained private; however, it did involve, as in the cases Accum cited, national regulatory institutions. The offices of the Excise and the Attorney General prosecuted dealers who had passed off imitations for the genuine article (coffee, in this case).³⁸

Lobbies moved the legal process ahead. In 1877, the German *Landwirtschaftsrat* (Agricultural Council) addressed a white book (*Denkschrift*) on food adulteration to the chancellor. It detailed the disordered state of the market: its argument was that adulteration inflicted misery not only on consumers but on producers as well, since counterfeit products, imitations, and surrogates depressed prices of the original merchandise for everyone along the production chain even before they affected health; the lobby demanded a law to protect goods first, health afterwards. The reply to these reproaches and claims was bald-faced, though not misleading. Manufacturers of margarine, watered-down beers, imitation coffee, artificial ice, pepper-cum-dust, or other cheaper ingredients, as well as diluted wine, wine made from imported raisins, or wine made without grapes, replied that they actually promoted well-being, since they marketed such goods to people who would otherwise be altogether deprived of them.³⁹ Similar opinions punctuated public debate in France, but they took on a more poetic (or condescending) tone: “The clientèle of such inferior goods is incapable of paying the price below which goods of authentic quality cannot descend,” the Viscount d’Avenel wrote. “If they cherish the shadow rather than the real thing, wouldn’t it be cruel to disabuse them of their error? Let’s not forget: a great deal of fancy enters into our joys and pains.”⁴⁰

Take the case of butter and margarine. Margarine, the first industrial substitute for a natural foodstuff, was invented in 1869. The surrogate

was cheaper than the genuine article, and so its use had spread among the lower classes, a fact on which the industry prided itself; in France, the use of margarine seemed to have been confined to low-brow restaurants. Incidentally, Denmark exported so much of its butter to England before the outbreak of World War I that the Danish people developed a taste for its substitute and ended up among the highest per capita margarine consumers in the West.⁴¹ Product definition amounted to a passport to enter the market. The industrial substitute imperiled the status of butter. Legal recognition of substitutability was tantamount to lifting margarine up from the status of an incomplete incarnation of butter, to its full expression with identical uses. It would have instituted a level field of commercial competition between two equivalent products, not unlike the clash between the tropical cane and the temperate beet in the sugar market.⁴² The threat mobilized agricultural interests in Europe and North America throughout the late nineteenth and the twentieth centuries. Evidence to prove that margarine consumption was detrimental to health was scant, but health concerns over *artificial* butter (as it was frequently dubbed) did surface occasionally and were promptly used in the competition for market shares. One scandal occurred in northern Germany in 1911 where margarine was found responsible for several hundred cases of food poisoning.⁴³ Although no deaths ensued, the producers of butter seized the opportunity to call for more stringent supervision of their competitors. There was even some infighting in the union of German margarine manufacturers because the negative attention affected the industry's overall reputation. Consumers seemed less concerned. Already in 1882, the short-lived French journal *L'alimentation publique* noted "a curious detail, to wit, not consumers but agricultural societies are taking up the fight against deceitful practices which consist in selling as butter a product containing up to 80 percent margarine."⁴⁴ Butter producers campaigned to establish legal frames in order to segment the market.

The defense of market shares explains many of the peripeties in the rivalry between sugar and its industrial substitute, the astutely named saccharin.⁴⁵ Invented in 1878, saccharin conquered roughly 10 percent of the German, and up to 20 percent of the Bohemian sweetener market by 1890. At about the same time, many European countries, including Austria-Hungary in 1898 and Germany in 1902, adopted legislation which elevated saccharin to the status of a prescription drug and thus banned its commerce

to the limited sphere of the apothecary's counter. The legislative rollback varied in intensity from nation to nation, and the divergent enforcement promptly provoked a booming traffic in contraband. The more important a country's sugar industry, the more prohibitive were the body of laws codifying the uses of saccharin. Part of the sugar industry's importance derived from the monies the excise on sugar funneled into state treasuries (note that tobacco and its consumption, too, had already raised very similar issues). The indirect—and regressive—tax penalized consumers on the continent, but financed sales at dumping prices abroad where England absorbed between 50 and 75 percent of Europe's sugar exports. The imbrication of state bureaucracy, political parties, and pressure groups appears most clearly in Germany, where the sugar tax contributed almost 10 percent of the imperial government's revenues in the first decade of the twentieth century. Germany signed up to the Brussels' Convention abolishing direct and indirect export bounties on sugar in 1902 only after adopting a law severely restricting the circulation and usage of saccharin at home. At the other end of the spectrum, the absence of a strong sugar interest and the presence of a sizeable chemical industry explain the liberal handling of the sweetener question in Switzerland which, in good time, became the hub of smuggling networks. World War I loosened the fetters of the law: in the face of severe sugar shortages, the consumption of synthetic sweeteners sky-rocketed, sweeping away most every medical concern that had hitherto served as justification for repressive measures.

SELF-HELP AND CONSUMER ACTIVISM

Politics did not contain all the possible expressions of consumer attitudes. After all, buying power endowed even modest consumers with a lever to affect the market. That was true when sanitary crises hit and European consumers stopped eating north-American pork in the late 1870s; news about trichinosis and the risks of transmission to humans had generated anxiety and induced individual reactions. A movement, however, required a cause, and organization was a prerequisite for success. It did not come easily. In the 1830s, a French journal wondered about the reason why consumers did not get together in order to fight the abuses to which they were exposed, only to conclude (a century and a half before Mancur Olson)

that it was difficult to provide a single voice and purpose to the myriad individual consumers who waited for others to take the lead.⁴⁶

Cooperatives surely were one of the consumer movement's triumphs in controlling supply and quality. They ascertained independence from economic domination while playing by the market's own rules to participate in the gains that economic growth procured. Cooperatives were in the vanguard when it came to offering pure and unadulterated foods to their clients, since their foundation often preceded the implementation of national pure-food legislations. However, finding such goods proved no mean matter, and selling them was something of an obstacle course, to boot. Working-class consumers seemed to prefer the texture and the taste of their habitual, (possibly) adulterated, and usually lower-cost fare. The integration of pure goods into their food basket required prior education. To do so, cooperatives adopted labeling as the means to inform their members on the attributes of the merchandise on their shelves. The elimination of misrepresentation left choice in the hands of consumers, and the predominantly male leaders of the movement hoped this would steer consumers, among whom they targeted especially women, toward higher quality goods. The success was unclear. By many accounts, customers found cheapness more attractive than purity. Only the rigorous implementation of national laws would promote the cause of commercially pure foods.⁴⁷

Consumption could serve other than immediate material purposes. Forgoing goods produced by slave labor was an act of moral disapproval, just as the refusal, in the 1850s, to buy goods fabricated in the northern United States endorsed a political stance. Ambiguity remained, however. Beet sugar industrialists located in free-labor northern France wholeheartedly embraced the campaign to renounce plantation sugar from the colonies in the West Indies and the Indian Ocean before the abolition of slavery in 1848. Nevertheless, boycotts of goods that appeared to be morally or materially wanting dominated the tactics of early consumers' or buyers' leagues; their movers and shakers often hailed from the middle and upper classes, a fact that may explain their limited success at reaching the working classes whom they had set out to instruct. Other efforts aimed at widening product choice. In the legal battle over margarine's status, it was only in 1912, after the cost of living had soared for several years, that the French consumers' league, an early if ephemeral champion of a national office of consumer

affairs, urged buyers to abstain from dairy foods so as to curb the zeal of agricultural interest groups for legislation that would make it difficult for butter substitutes (lard, vegetable oils, and, of course, margarine) to find their place on grocery shelves. The campaign was a disappointment. As late as the 1930s, French consumers still lacked the clout “to defend their legitimate interests.” Legal empowerment and public recognition, the two building blocks next to money in order for an institution or a lobby to be a contender, took a long time coming.⁴⁸

Commercial exchange of food became ever more important in the nineteenth century. It stimulated economic growth that helped to reduce the precariousness of the food supply in Europe. International trade expanded, and urbanization obliged a growing number of residents to fill their baskets at retailers or on the market, and their bellies at caterers on the streets, or in shops and restaurants. These developments by no means eliminated inequality and the occasional string of food riots; but they improved general living standards in Europe, if not necessarily elsewhere. Progress created new challenges. Food continued to generate controversy. The lengthening of the supply chain and stiffer competition increased opportunities—and temptations—for fraud. Even the invention of new products tested the routine of provisioning. Consumer cooperatives invented strategies that circumvented the market’s hold on their members’ purses or, at the least, reduced their exposure to the market’s vicissitudes. However, self-help was not enough to provide access to a sufficient quantity of healthy supplies. Crises, fears, and instability everywhere stimulated economic policies that sought to guarantee commercial honesty, consumer protection, as well as public order. While a few measures may look like original building blocks of the welfare state that we have come to know in the twentieth century, their aim was less ambitious. It was to correct market imperfections by imposing legal rules to prevent health hazards without disposing of the market altogether. The endeavor was a political balancing act. It meant reconciling *laissez-faire* approaches and regulations. Adherence to one or the other outlook pretty much depended on material interests, and these more often than not pitted economic actors against each other. The issue urgently raised the question of the relations between state and society. The solution came by way of information. Indeed, businessmen

and politicians had learned that the market could only ensure its imperfect circulation. The legal requirement to display information concerning the product was one of the nineteenth century's key economic innovations. It is something of an irony that it was consumer (and producer) cooperatives that had elevated reliable product descriptions into a sales' argument before the law imposed the market to do so. The pitch was not quite the same: while cooperatives aimed at educating their customers and moving them toward enlightened sovereignty, industry and business used the claim of the consumer's autonomy to deflect further regulation. Still, these original legal obligations opened a new chapter in economic policing. The precise identification of products was to rein in dishonesty in marketing, to provide the wherewithal needed to make educated choices, and so to lubricate exchange. Adoption among different nations varied—some emphasized the elaboration of private norms while others relied on public standards. However, the theory of information asymmetry and the recurring debates on public policies on labeling confirm that we still live on with this legacy dating from the turn of the nineteenth to the twentieth centuries.

CHAPTER FIVE

Eating Out

PETER SCHOLLIERS

All over the world, fundamental societal changes radically altered the way people ate out throughout the nineteenth century. However, despite sweeping processes of commoditization, pre-1800 practices of eating out have persisted. These consisted of plain food in fields, charitable organizations, and workshops; of simple fare in inns or (pilgrims') refuges; and of more refined food in lodging houses and hostelries. Yet, the swift urbanization, industrialization, individualization, and internationalization during the nineteenth century also affected these customary forms of eating away from home. Such changes, though, faded in the light of the diffusion of new forms of eating out. Outstanding among these was the restaurant, a public place of fancy eating with innovative conventions, which, as a result of European migration and colonization, became a nucleus of urban, bourgeois, and cosmopolitan culture. Eating out up to 1914 mirrored the growing and wide-ranging commercialization of society, with less dependence upon household labor and gradually greater reliance upon market supply.

Eating out takes many forms. Defining it in the nineteenth century as "consuming food outside the household,"¹ is too broad because it includes sporadic nibbling, food taken from home, and food consumption in institutions where people may reside for longer periods, such as hospitals, prisons, or army barracks. If eating out is defined as consumption of food and drink outside the home that has not been obtained from household supplies, the

definition is more focused but still lacks precision. If eating out is associated only with a pleasurable, elegant occasion, then the definition is too narrow. If one focuses on the *meal* (with snacks that may substitute for it), which is taken outside one's residence, excluding what is brought from the household, and for which one pays, eating out is given a clear significance. This definition thus addresses the history of eateries, canteens in schools and factories, bars, cafés, fancy and popular restaurants, street stalls, fish-and-chip shops, trains, brasseries, and hotels. It omits food bought from a caterer and eaten at home, food brought from home and eaten at work or as a picnic in the open, and food consumed at friends' and relatives' homes.

WORK

For most people in most places and at most times, eating outside one's dwelling meant having a simple meal during work in the fields. In most parts of the world, this hardly changed in the course of the nineteenth century. In some regions from about 1800 onward, industrialization, migration, and urbanization led to huge changes, which in the long run influenced the way people ate at work. Factories with hundreds of waged workers appeared that offered no eating facilities whatsoever. Most factories and workshops had a lunch break that allowed workers to go home at noon.² If workers had no time to go home for lunch, they ate what they took from home or what was brought to them by family members. Often, pots with soup, stews, or potatoes were heated on the factory's steam conduits, (ingenious) branches thereof, or on little stoves. In a few European countries, factories were legally obliged to set up an eating hall, as, for example, in Switzerland in 1877.³ These were hardly popular, one reason being that heating (and sometimes preparing) the food was time-consuming, which limited the working time and, hence, earnings. In some countries, food and drink provisioning was considered part of the wage, as was the case in German workshops up to the 1820s, which led to disputes when the quality or quantity of food changed. This habit vanished in the course of the century. Some workers, such as miners, ate in extremely bad conditions; that is, in the workplace, and without comfort or hygiene. Eating food from home meant that mill workers stuck to their habitual food patterns, the difference to the late eighteenth century being the new environment.⁴

The gradual reduction of the working day in Europe and the United States in the second half of the century limited the workers' lunch time (varying between 15 and 60 minutes, and written down in factory regulations), which no longer allowed workers to have a hot lunch at home. The British Factory Inspectors, who controlled the application of the Factory Act of 1850 (limiting the working time for women and children), described this as "nibbling and cribbling at meal-times." This reduction of "own time" caused protest and even strikes. The limitation of lunchtime and the fact that the distance between work and home increased, forced more workers to bring along food from home, unless they purchased it in the vicinity of the workplace. The latter had long been the case in cities throughout the world, where many jobs of very various skills were created, which attracted numerous workers. In Buenos Aires, Constantinople, or Singapore before 1800 workers bought soup, grilled and cured meats, hot and cold pastries, fried vegetables, sweets, noodles, and drinks in eateries, market stands, inns, and at pushcarts and in butchers' shops, to take away and eat in the street (mostly limited to men) or in the workshop (both men and women).⁵

In the nineteenth century, innovations appeared in regions of rapid change. According to time, prestige, and buying power, workers could choose between a fast-growing supply of food in an increasing variety of eating places. In London around 1850, almost 4,000 traders sold ready-to-eat food in the streets, which was prepared and kept warm on little charcoal fires. Workers could choose between soups, fried fish, sheep's feet, baked potatoes, sandwiches, (meat) pies, cake, muffins, (jellied) eels, boiled eggs, gingerbread, meats, bread-and-butter, and drinks (coffee, tea, milk, water, wine).⁶ In general, prices were low and the quality was poor, but most workers had no alternative because of the minimal time allotted for shopping and cooking, while, at home, cooking facilities were often lacking. This food was consumed in the streets, pubs, or workplaces; although workers preferred in general to stay away from work, benefitting from a moment of freedom and individuality (most of them chose to eat on their own).⁷ Workers could also eat in cookshops (called *ordinaries*), tripe shops, and other modest eating houses, which were often grubby places. They gained popularity because of their wider choice and the closing of public venues.⁸ Coffee shops supplied breakfast, simple meals, and non-alcoholic drinks, as well as newspapers and conviviality.

In Paris in the same period, workers would have had less choice with regard to street food,⁹ although female vendors equipped themselves with portable kitchens, selling boiled meats and *charcuteries*. However, workers could eat in many diverse cabarets, wine shops, estaminets, or *traiteurs* (low-priced eateries), which existed prior to the French Revolution of 1789.¹⁰ Around 1850, these offered menus that included soup, some meat, and as much bread as one wished (0.85 francs),¹¹ as well as more refined menus with soup, a meat dish, cheese, dessert, bread, and wine (1.50 francs). Modest businessmen, civil servants, artists, army men, and self-employed artisans visited these places too, perhaps guided by the advertisements that by then appeared in newspapers and magazines. Some *traiteurs* sold cold cuts, bread, and half a liter of wine for a mere 0.40 francs. This was the case at *La Californie* in the 1860s, which provided 3,000 meals per day in the self-service manner, and with waiters serving wine and cleaning up the tables; it was the place where Lee Meriwether first encountered self-service in the mid-1880s.¹² In general, the food was of poor quality (with *viande basse*, or *lesser meat*, such as intestines, feet, or ears).

The range of choice in eating-out places widened with the transformation of the economy, and particularly with the development of office employment in the last quarter of the nineteenth century. In Europe and the United States, the number of street vendors fell because of more severe restrictions, such as fixed routes and time schedules, which were intended to contribute to the embellishment and modernization of towns. More sophisticated eateries appeared. These places benefitted slowly but surely from both small and big technological innovations that touched upon all aspects of the food chain, and that accelerated from the 1880s onward, including transport (packaging, railroads), preservation (canning, cooling), and preparation (gas and water supply, cooking devices). Electricity was used for lighting, but by 1900, it was being utilized for cooling and cooking.¹³ These technological features reduced production costs effectively, and allowed the setting up of a street stall or a modest eatery. British towns were full of cookshops that sold pies, puddings, sandwiches, and sweets, while fish-and-chip shops became very popular.¹⁴ Tea shops, selling cakes, sweets, light refreshments, and tea in shopping and business areas, and in the vicinity of railway stations, appeared in English towns. Catering chains such as *Lyons* and *ABC* in London developed tea shops, aiming at forging a

classless atmosphere. Both firms created the first European mass-catering systems with standardized products, prices, and service.¹⁵ By then, towns in the United States had hygienic and relatively cheap cafeterias with small kitchens that had large steel cooking plates on which food was prepared in a rapid way, which attracted many (female) office employees.¹⁶ Following a German example, so-called automats (vending machines with fresh food) appeared in Philadelphia, New York, Boston, and other North American cities prior to 1910, with the emergence of the first chain caterers.¹⁷ In Germany, kiosks were installed, selling newspapers and plain food such as sausages, bread, pastries, and *pommes* (French fries), slowly making street food acceptable in this society where eating in public was condemned.¹⁸ In the Netherlands, which did not have a tradition of eating out except for some sandwich shops in Amsterdam in the 1850s, milk bars, lunchrooms, and tearooms appeared in the 1890s, oriented toward white-collar workers and shoppers.¹⁹ Another novelty developed in European towns around 1900, which offered an acceptable environment for workers eating in public: cooperative restaurants that sold a daily special at a relatively low price, consisting of soup, a main dish, dessert, and a (non-alcoholic) drink.

For a long time, moralists had disapproved of workers eating out, particularly women workers. Moralists opposed eating out to eating at home with the family, according many respectable values to the latter (frugality, morality, neatness, reliability, respect for institutions, and religion). Eating out was assumed to entail the opposite of these qualities. In countries of the Near and Middle East, for example, no women ate in public.²⁰ The nature of some places, such as wine shops, was criticized, and many observers condemned both the innkeeper and his patrons for selling and buying cheap alcoholic drinks.²¹ There were other objections too. Eating out was considered far too costly for workers who should have spent their money in a much more sensible way. Only eateries that did not sell alcohol, such as the Dutch tearooms or the German *Trinkhallen*, could count on some consideration. Moreover, the freshness and composition of the food was often questionable. To cope with the latter, many towns set up a system that consisted of authorization and control of street vendors and public eateries, which was the case, for example, in Brussels in the 1840s, with ambulant and fixed sellers of *frites* (French fries) (figure 5.1). In the larger



FIGURE 5.1: Auguste Aubry, “Bruxelles le soir. La marchande de pommes de terre frites,” appeared in *L’Europe illustrée* (undated, c. 1870).

cities in the second half of the century, sanitary inspectors at the service of the local government controlled the freshness of the food sold from shops, pushcarts, and eateries. In many countries in the last quarter of the century, national laws were passed whose aim it was to secure healthy food in shops and stalls.

In earlier times, public and private authorities had intervened more directly in food provisioning when organizing public kitchens. For example, at the Jaganath temple in Puri (Orissa, India), dozens of cooks had long served countless people every day, thus fulfilling virtues of charity and faith.²² In many cities in the world during periods of rapidly rising prices, public and private authorities set up temporary kitchens supplying basic food. In Europe, bread, biscuits, and soup were distributed in the extremely expensive 1810s and hungry 1840s. These charitable initiatives were paid for by local governments as well as via private fundraising. For example, the French chef Alexis Soyer (1810–1858), who had cooked in the fancy *Reform Club* of London (see below), opened a public kitchen in Dublin in the hunger year of 1847 at the request of the British government,

which could serve 1,000 people per hour.²³ This practice of occasionally distributing food, however, tended to disappear in Europe in the second half of the nineteenth century, because of the gradual improvement of the organization of enduring private and public charity. Yet, public food aid contributed to the survival of thousands of people in particularly severe conditions, such as during World War I, when in Europe, soup kitchens and bread distribution operated on a large scale.

A very direct way of controlling workers' eating out habits consisted of setting up canteens by and within the factory. In this way, the workers' time was fully monitored, while it became possible to intervene in what, and with whom employees were eating and drinking. Still, the first initiatives for establishing canteens were linked to heartfelt paternalism. Mill owner and social reformer, Robert Owen (1771–1858), installed kitchens and dining rooms in the New Lanark cotton mill (Scotland), supplying cheap and substantial meals. Up to 1914, however, company canteens were rare in Great Britain, and only big firms, such as Cadbury or Lever Bros., had developed dining facilities, supplying cold and hot meats, eggs, pies, or stews at relatively low prices. Cadbury innovated in mass catering, introducing the counter system, the display of dishes, and rapid payment, by selling a daily special to a large group of diners within a very short time, with men and women eating separately.²⁴ Throughout the European continent and North America, factory canteens developed more smoothly from the 1870s onward, although prior to 1914 these remained marginal. In Switzerland in 1914, for example, no more than 2 percent of the workers ate lunch in factory canteens.²⁵ Their success was linked to several factors. In Germany, for example, the price of the food seemed to be decisive in the workers' choice.²⁶ Thus, in factories that provided food at very low prices or for free, attendance reached 90 percent, but where food was more expensive, less than 10 percent of the employees used the canteen. The quality of the food mattered as well, in that workers rejected charity-like meals but preferred variety, and particularly sufficient meat. Also, age, gender, and profession played a role in the choice for the factory canteen, with women, young people, and white-collar employees showing generally most interest. Some workers were suspicious, not accepting the supervision by the company and believing that the (subsidized) canteen meals were primarily meant to keep wages low. Besides, they loathed the fact that payment for

the canteen food was directly subtracted from the wage, which reminded them of the truck system (payment in goods and/or the obligation to buy goods at employers' shops). Hence, some workers boycotted the canteens.

Around the same time, school canteens appeared in some countries, following largely on from the development of industrial canteens. In most schools around the world until 1914, most pupils brought food from home. With the coming of compulsory school, however, simple meals were provided at low prices or for free. The French state saw it as its duty to supply meals in order to cope with pauperism, so-called absent mothers (because of jobs in workshops), and long distances between dwelling places and schools. Meals were used as an educational and moralizing means.²⁷ Laws were passed that organized and controlled school canteens on the national level; by 1880, there were 500 school canteens in the country.²⁸ Throughout the United States and Europe (and its colonies), canteens became popular in preparatory education, but far less in secondary education or universities, where attempts to launch canteens often failed (as was the case in Paris in 1901, where all was set to supply 100,000 meals per day by the *Association des étudiants de l'Université de Paris*). Due to the pressing concern with cost, the quantity and quality of the food were generally low (monotonous, deficient, flavorless), and pupils often boycotted the school canteens, despite the slowly growing concern for variety and health.

TRAVEL

For a long time, people had travelled over short and long distances for diverse reasons. In general, they brought along quite sizable provisions. Some ate in public houses in towns and villages, which provided food of very varied quality and price. This remained unchanged up until 1914. In the nineteenth century, however, completely new travel possibilities emerged, with direct consequences for the way people ate. Trains started to run in Europe in the late 1820s, and the railway spread all over the world in the second half of the century. From the 1870s onward, large steamships facilitated intercontinental travel, transporting millions of people. In the 1890s, the automobile appeared, and in 1900, when France had 2,400 registered automobiles, the first *Guide Michelin* was published on the occasion of the Paris World Exhibition. This new form of travelling was largely part of the

way of life of the bourgeoisie, which was growing in terms of numbers and of influence; travelling provided flamboyant opportunities to demonstrate success and good taste. However, the common people, whether migrants moving from Europe to the New World or daily commuting workers, also used the new means of transportation.

The various types of travellers could make use of new sorts of eating-out facilities, which appeared in the new railroad stations. In most countries, ambulant vendors supplied train travellers with simple cold and hot food, and drinks, but stalls soon appeared, offering somewhat more choice and greater quality at higher prices. In larger towns, coffee or tea bars were set up in the 1860s, selling sandwiches and full meals, such as the *Harvey House* in the United States (with relatively cheap food in a clean environment, becoming a model for fast-food outlets).²⁹ In Japan from 1885 onward, *ekiben*, a lunch in a wooden box, initially consisting of rice balls and vegetables, sold in huge numbers in railroad stations and on trains. In India, *G. F. Kellner and Company* acquired the contracts to sell fresh food and refreshments on the East India railways in the late 1860s. In big cities, restaurants opened within the rail stations. In France, the *Buffet de la Gare* became a basic part of the station (there were 445 of these in 1914). Some of the buffets were quite modest, showing little difference from a coffee bar, but others developed into fancy places, such as the famous *Buffet de la Gare de Lyon* that opened in Paris in 1901.³⁰ Richly decorated, spacious, and comfortable restaurants were built within the railroad stations of many big cities, whether in Africa, the Americas, Asia, or Europe. Often, these restaurants had a double entrance, one from the tracks, and the other from the square in front of the station, where more eateries of various types appeared.

In the United States in the late 1860s, the Pullman Company designed a sleeping and dining railroad car with highly luxurious features, offering gourmet meals at exorbitant prices. In Europe, the Orient Express, owned by the *Compagnie Internationale des Wagons-Lits*, ran between London, Paris, and Constantinople from 1883 onward and offered services similar to those of the Pullman cars. Both companies grew rapidly up to 1914. Eloquent testimonies about these cars refer to the utterly luxurious space (leather, gas and electric light, nicely decorated tables with silverware, and so on), and to gourmet dining. Moreover, the brand new experience of eating and moving fast was emphasized, while patrons were surprised by the efficiency

of waiters and cooks who had to make do with a tiny space.³¹ Cooking and eating in trains introduced new design, technology, and utensils (steam ovens, heaters, coolers, and so on), which found their way to the kitchens of eateries, bars, restaurants, and homes.

Intercontinental journeys on sailing ships implied bringing along one's fare. With voyages of up to two months (between Europe and New York, for example), this meant wretched food. On steamships, the price of the voyage included the food (for a trip that lasted about one week from Europe to New York). According to an advertisement of the *Anchor Line*, the food consisted of tea, coffee, or hot chocolate, sugar, bread and butter, or biscuits and butter (breakfast at 9 A.M. and supper at 6 P.M.), and soup, beef or pork with potatoes, and plum pudding on Sundays (dinner at 1 A.M.). Migrants, however, testified to the appalling quality of this food.³² Unsurprisingly, the quality improved according to the price, and some steamships offered very luxurious food, comparable to what was served in the fanciest restaurants of the day.³³

PLEASURE

Eating places for travellers, office workers, or artisans attracted other categories of patrons too, such as merrymakers, people celebrating an occasion (related to work, study, friends, or relatives), and shoppers. They ate out for various reasons, but enjoyment and conviviality were habitually involved. This was not new: people have eaten for pleasure for a long time, but for some this occurred regularly, whereas for most it was exceptional. Rich people strived for refinement and innovation, while poorer people were happy with little more than the usual snippets. However, the generally increasing wealth of the nineteenth century brought about sweeping exploration and sophistication in taste, with the modern (French) restaurant being the most spectacular laboratory. This type of eating place may be defined as a public space where one went for leisurely eating, as a destination in itself, as opposed to, although sometimes intermingled with, eating out related to work, travel, or shopping. This implies that the modern restaurant was a sumptuous affair for rich people, which not only provided gustative pleasure, but also an urbane means to define one's social position. Clearly, the modern restaurant did not introduce notions of pleasure and

status related to food, but it certainly diffused these among the *nouveaux riches*, and, later, broader social layers.

The coming of the modern restaurant has been a subject of debate. This is not about the French origin (which is unquestioned, despite forerunners in China or England—see further on), but about the chronology. Many authors point to the French Revolution of 1789 as the start of the modern restaurant, with the large supply of labor of cooks and servants rendered unemployed because of fleeing or executed aristocrats. These authors do not claim that the Revolution actually created the restaurant, but state that it greatly accelerated the restaurant's diffusion.³⁴ Some authors, however, assert that the 1789 Revolution had limited importance, thus highlighting the continuation of gourmet eating out.³⁵ Prior to 1789, some eating places in Paris had all the characteristics of the modern restaurant: fancy eating, à la carte menus, abundant choice, individual tables, sumptuous décor, flexible mealtimes, urban locations, competent waiters, fixed food prices, and payment at the end of the meal.³⁶ All this was opposed to the *table d'hôte* with its coarser eating, little or no choice, set mealtimes, forced companionship, and fixed, all-inclusive prices for a meal.³⁷ The *modern* restaurant was born in the second half of the eighteenth century, but its success and worldwide diffusion is a saga of the nineteenth century.

Yet, eating out for pleasure in public was not an exclusively Parisian affair in those days. In eighteenth-century England, the gentlemen's club offered a similar service, albeit with a less public look. Some of these places had good food as their unique goal, such as the *Sublime Society of Beef-steaks* (1732–1869). Many of these clubs continued their existence into the nineteenth century, employing renowned chefs (such as Soyer, or Charles Francatelli, 1805–1876).³⁸ In China and South East Asia, respectable wine houses are considered to be long-standing forerunners of (modern) restaurants, offering pleasant surroundings, opulent food, and sociability. Their evolution into genuine restaurants in the nineteenth century may be linked to the preference for public showing off during celebrations.³⁹ In many countries, however, leisurely eating out appeared with the diffusion of the French restaurant in the course of the nineteenth or even the twentieth centuries.

Many authors assume that touring French chefs led to the diffusion of restaurants.⁴⁰ This is only partly true: the mere presence of a good cook is

insufficient to explain the diffusion of the restaurant. Its success in Paris around 1800 was caused not only by supply, but also by demand and a new gastronomic discourse. Hence, when looking at the spread of restaurants in Europe and the world, three actors must be considered: the cook, the writer, and the diner. Together, they constructed culinary zeniths (or places and moments of renewal). Fancy restaurants influenced, sooner or later and to a varied extent, cooking and eating in simple eateries as well as at home.

The cook was a craftsman and, when the owner of his restaurant, also a genuine businessman. He aimed to improve his (financial) situation by developing skills, building a reputation, and making a niche. Above all, he innovated and continued, to a greater or lesser extent, to do so up until 1914. If Antoine Beauvilliers (1754–1817), owner of the reputed *Taverne de Londres*, cooked in the so-called aristocratic way, later chefs constantly reshaped and reinvented haute cuisine. Adolphe Dugléré (1805–1884) worked with “chef of kings and king of chefs” Marie-Antoine Carême (1783–1833), to become *chef de cuisine* at *Les Trois Frère Provençaux* and, later, the *Café Anglais*, where Urbain Dubois (1818–1901) also worked. Dubois is considered to be the link between Carême and that other great French chef, Auguste Escoffier (1846–1935).⁴¹ These cooks, all of them working in Paris, set the rules, refined them repeatedly, and directly influenced thousands of anonymous, wage-earning, and toiling cooks and waiters. Thus, in the 1840s the *service à la Russe*, with the serving of subsequent dishes according to a strict order, replaced the *service à la Française*, with the serving of all dishes together. This implied changes in cooking, organization, utensils, serving, and eating, with the application of new technology (canned food, gas ovens, mixers, heaters, and coolers). Also, this supposed new ways of preparing (for example, braising of meat, complex stuffing, and lighter mousses), and new flavors and dishes (such as *Filets de sole Véronique*, *Consommé au tortue*, *Sole normande*, or *œufs pochés au gratin*).⁴²

Gastronomic expertise involved not only cooking, but also the whole experience of fancy eating out, which included the restaurant’s décor, the waiters’ appearance, and the behavior of all participants (figure 5.2). The first Parisian restaurants were luxury places with many aristocratic references (clothing of servants, presentation of food, general atmosphere), but later



FIGURE 5.2: [Unknown author] “The dining room of the Spa Club.” Spa (Liège Province, Belgium), c. 1900 (Source: Library of the University of Ghent, BRKZ.TOPO.0308.A, object ID: 308-A-00001_2004_0001_AC.)

the restaurants developed an architecture and a design of their own. This appeared particularly with the coming of the *grand* hotels throughout the world in the 1860s, which generally had a fancy restaurant, and which required enormous investment.⁴³ A superb example was the London Savoy (1889), managed by César Ritz (1850–1918), where Escoffier cooked for almost ten years. The dining room was sumptuously ornamented and the tables attractively set with expensive cutlery, while the large kitchen contained the technology of the day. This type of hotel, to be found all over the world by 1910, supplied the space for big parties, glamorous events, and unforgettable commemorations.

Refined and innovative cooking made the reputation of chefs, but their fame was greatly fostered by writings. Carême, Dubois, Jules Gouffé (1807–1877), Soyer, Pierre Lacam (1836–1902), Edouard Nignon (1865–1935), Philéas Gilbert (1857–1943), Prosper Montagné (1865–1948), Escoffier, and others all wrote books, launched specialized magazines, or published in newspapers and periodicals. Often, cookbooks by these chefs were rapidly translated into other languages. For example, Gouffé’s *Livre de cuisine* (1867) appeared in Dutch (1870), English (1871), German (1872), Spanish

(1885), and Italian (1895).⁴⁴ Outside France, cooks and gourmets published books that adopted (elements of) French cuisine, or which mixed local with French recipes.⁴⁵ Thus, cooks not only published recipes, but also shaped and renewed culinary language, which started with the creation of menu cards containing the names of new dishes. Advertisements in newspapers or on posters appeared with the first restaurants, stressing the arrival of wine, the specials of the week, or a particular asset (such as music). Culinary journalists equally made the fame of chefs and restaurants. Between 1803 and 1812, Grimod de la Reynière (1758–1838) published the *Almanach des gourmands*, a yearly guide (or, rather, celebration) of restaurants, and an efficient mediator of innovation of new tastes and manners. He not only shaped reputations and hierarchies, but also forged codes and norms.⁴⁶ Culinary critics in France and abroad imitated Grimod de la Reynière, thus further diffusing the Parisian way of doing and thinking.⁴⁷

Travel guides started to pay increased attention to food. The German Bädeler publishing house, for example, started a series of guides in 1828, and published French and English versions whose culinary norm was French. Initially, references to food were brief and general (for example, about Brussels in 1878, “The restaurants are elegant, like in Paris”), but became more elaborate and precise (for example, about Brussels in 1891, “*Café Riche*, very good, the place-to-be for the young, rich and famous”). Another means of diffusion of French haute cuisine and the practice of fancy eating out were magazines and journals. In France, professional journals existed, such as *L'Art culinaire* (1883) that had subscribers throughout the world, alongside more popular ones that aimed at French housewives, such as *Le Pot-au-Feu: Journal de la cuisine pratique et d'économie domestique* (1893).⁴⁸ Outside France, the *Epicure* (the United States), *Kochkunst und Tafelwesen* (Germany), or the *Chef* (England) were published (with various levels of success). Associations of chefs and entrepreneurs (such as the Universal Cookery and Food Association, 1885, based in London) supported the journals. These associations also disseminated French cuisine via international exhibitions, cookery classes, and culinary competitions (Frankfurt 1878, Paris 1883, Vienna 1884, London 1885, Brussels 1887, New York 1891, and annually in Paris from 1900 onward).⁴⁹ Finally, the fame of restaurants was consecrated by means of novels and serial stories in newspapers, and by paintings by

renowned artists (for example, Manet or Van Gogh), thus testifying to the huge role of these public places.

Waiters could travel, cooks could publish books, culinary critics could make and break reputations, and gourmet associations could thrive, but only if enthusiastic diners were present. In Paris around 1800, demand for gourmet food was very great.⁵⁰ From all over Europe, thousands of politicians, artists, administrators, bankers, civil servants, diplomats, landholders, entrepreneurs, military men, and rich tourists arrived in the city and met in theatres, parks, inns, clubs, salons, and restaurants. What characterized them was their high spending power (or credit rating), the will to build and display power networks, and the desire to enjoy. The restaurants offered all of this, which turned them into the very kernel of bourgeois life in the nineteenth century. Success in business or politics, trade celebrations, private or public anniversaries, official visits, and so on were all occasions to dine in a luxurious, conspicuous setting. *See and be seen* became the dictum of thousands, adopted throughout the world in the course of the nineteenth century in which wealth was created like never before.

A link may be observed between the general business cycle and haute cuisine. The booming 1850s and 1890s, with a considerably expanding and wealthier bourgeoisie, coincided with culinary innovations launched by Dubois and Escoffier, respectively. Outside France, this bond between economic and culinary performance also appeared. Most patrons seemed not to care about high prices.⁵¹ In 1820, for example, a man paid 50 francs (which would feed him for a month in his home town) for one, *normal* Parisian meal. Famous is the story of a Parisian diner in the 1830s, who bet he could eat a meal on his own for 500 francs (the yearly pay of an unskilled laborer). He succeeded easily.⁵² The French writer Alexandre Dumas, a refugee in Brussels in the 1850s, spent a fortune on eating, drinking, and partying. Patrons, thus, were eager to pay and willing to borrow the money if necessary (although newspapers regularly reported unpaid bills). Up to 1914, prices in fancy restaurants rose constantly, keeping a differential with those in brasseries or buffets in order to demarcate social differences. Because of the generally rising purchasing power, more people could spend money on leisure pursuits by 1890, among which was the custom of eating out. Gourmet restaurants needed to maintain their standing, and high prices were one means to achieve this.

Right from the onset, the restaurant was seen as a *decent* public place where both men and women could come. At first, Parisian restaurants offered private rooms to unmarried men and women, but by 1850 this had disappeared. By 1870, unaccompanied women could enter a restaurant without any embarrassment. Moreover, the story goes that Escoffier's refinement and simplification of haute cuisine was caused by the increasing influence of female diners.⁵³

CONCLUSION

This chapter suggests a neat classification of eating places according to work, travel, and leisure; yet, in practice, most eating places welcomed very diverse kinds of diners. In 1820 the London street vendor sold cold and hot meats to artisans, travellers, and businessmen, in 1870 the Parisian restaurant welcomed bankers, as well as merrymakers and gourmets, and in 1900 the New York diner served food to office workers, shoppers, commuters, and theatre goers. Common to these eateries was their rapid multiplication along with urbanization and relentless commercialization, as well as their use of technology and continual upgrading. Rising purchasing power and growing interest in all matters pertaining to food were major factors in triggering this strong development. By 1914, eating out had formed a new and important branch of the economy, with inestimable jobs and sales' volume, supplying plain and very fancy food to millions of people all over the world. French cuisine dominated the grand tables of the world, but it adopted constantly regional and *exotic* influences. In turn, fancy cuisine transformed, in one way or another, local foodways.

CHAPTER SIX

Professional Cooking, Kitchens, and Service Work

AMY B. TRUBEK

Transforming food from a state of nature to a product of culture has always preoccupied human societies, whether small-scale tribes of hunter-gatherers or large-scale, complex urban empires. Oftentimes food scholars have assumed that underlying all this variation was a singular continuity: kitchen work as an individual or family dominated domestic task, with only elites capable of commanding the resources to have other people cook. Research over the past decade reveals much greater fluidity between domestic and public cooking, especially over the past two centuries.¹ And as Jacobs and Scholliers point out, the many forms of cooking and eating that emerge often “confront and interfere with each other.”² In the modern period people became increasingly able to make *multiple* choices about what to cook and eat: from day to day (lunch at home or lunch at a tavern); from place to place (on a country farmstead or at an urban boardinghouse); and from country to country (food cooked by slaves on a plantation or by wage laborers in a commissary kitchen). During the years around the dawning of the twentieth century, increasingly global trends of urbanization,

industrialization, and migration became powerful forces shaping everyday choices of what to cook and eat. This chapter looks closely at what happened to kitchen work, the labor that moves food from the raw to the cooked, exploring continuities and changes in this ubiquitous form of practice during a period characterized by the growing economic power of capitalism, the on-going political power of colonialism and imperialism, and the heightened social and economic power of urban groups.

A nineteenth-century Parisian cabinet maker chose to purchase all his workday meals at the local tavern, and his wife “often fetched her own meals from a local restaurant.”³ In an early twentieth-century dietary study of urban Pittsburgh, selected households of a professional man, a skilled artisan, a skilled laborer, an average day laborer, and an unskilled mill workman were chosen for observation. The study found that all these households went to the bakery to get goods, especially pies and crackers. Everyone except the professional man also bought baker’s bread and cake, with this man’s household an exception probably because they could afford to have a domestic servant make bread and cake each day.⁴ In late-nineteenth-century historical accounts, travelers to Mexico City commented on the foods: “women wandered the streets with baskets of corn confections such as tamales and quesadillas, while men carried improvised ovens with pastries and *barbacoa*.”⁵ As illustrated in these examples, the pattern of movement from rural to urban areas led to new culinary paradigms, including innovations in the organization of kitchen work (though it is worth remembering that the homemakers who struggled to make ends meet in the nineteenth-century countryside often relied on a combination of domestic skills and business acumen to improve family revenues; they peddled home-baked goods or spruce beer at fairs, militia trainings, or other communal, or church festivals).⁶ New configurations of time (the workday) and space (the apartment, the street, the shops) meant that by the late nineteenth century the connection between the act of cooking (or baking) and the act of eating was not necessarily tightly bound.

This shift away from individual or family subsistence as the primary mode of obtaining food to increased reliance on others to perform such labor can be examined using Braudel’s classic division of history into events, cycles, and structures.⁷ Such a shift has been a long-term structural change revealed in varied patterns (small-scale domestic cookery versus



FIGURE 6.1: Cook in the rue de Stamboul, Constantinople, Turkey, c. 1880 (Library of Congress, Washington D.C.). The American traveller Lee Meriwether marveled at the dexterity of such street cooks in the Mediterranean and the crowds around them: “No matter what the time of day, the cooks and the crowd are there. They seem to eat all day” (Meriwether 1892, 116).

commercial kitchen work) and events (purchasing a meal or components of a meal). Manifestations of this shift, seen in both broad trends and in localized actions, included new forms of kitchen work and types of kitchen workers in both domestic and public domains of social life.

Identifying the possible forms of labor and the primary locations for transforming food from a state of nature to a product of culture requires an examination of a food system. In this approach, there are multiple sites for transformation of food, including bakeries, slaughterhouses, creameries, factories, restaurants, and finally, homes. By the late nineteenth century, the organization of the modern food system and its associated values both reflected and shaped persistent structural shifts in the organization of everyday life such as the increased movement of people from rural to urban areas, the changing organization of work and leisure time, industrialization of food production from farm to table, and the increased use of technology

in all forms of kitchen work. In this context, the everyday decisions about what to cook, how to cook, who to cook for, or whether to cook at all were powerfully influenced by how individuals intersected with larger social and economic systems. The period of 1880–1920 marks an important transitional period, when these structural shifts became broader (moving around the globe due to colonialism, migration, and trade) and deeper (engaging larger numbers of people), and in many ways setting the stage for the organization of our contemporary system.

PLACING KITCHEN WORK

The complexity of considering kitchen work thus lies in its very fluidity. Understanding cooking as a form of paid labor needs to account for cooking as a form of domestic duty, and vice versa, for the myriad, everyday individual choices that ultimately make the modern food system took place in both familial and commercial domains. This was a crucial period in a long-term process (continuing through to today) because the commercial domain became more prominent.

One example is baking, which has long been a primarily communal practice, especially for bread. Among culinary cultures relying on bread as a staple there has been a long history of group sharing of ovens; families would bring their loaves to the village oven to bake: “From ancient times, bread-making had been shared between the bakers’ oven and that of the home. Bakers guilds operated in the towns; in the country, women met their families’ needs by baking enough bread for up to a month in their own ovens.”⁸ This long-standing set of shared but distinctive practices for making bread was transformed in Europe during the nineteenth century due to the development of mills driven by steam power and iron rollers replacing mill stones. Larger scale, commercial bread production began to compete with numerous small-scale bakeries. This was particularly true in rapidly expanding urban areas where the population density meant that there were more cramped living quarters, including small and inadequate kitchens. In the United States, for example, already by the 1870s there were “6,396 bakeries in the United States, roughly 1 for every 7,800 Americans,” and this number kept increasing, so that “there were twice as many bakeries per capita in 1910 as there had been in 1880.”⁹ By the twentieth

century this culinary practice remained situated in both spheres, but in urban areas home baking was increasingly defined as an occasional choice and commercial baking was increasingly defined as the everyday standard.

John Burnett points out that over the course of the nineteenth century in Britain “eating out” was associated both with the necessity of work and the choice of leisure—the beginnings of longer term transformations in who actually cooked in relation to when, and where food was to be eaten. He discusses the different but equal requirements for laborers of all types to source food outside of the home for those involved in agricultural and industrial work. Agricultural laborers, who “remained the largest male occupational group—871,000 in 1881,” had to bring their food with them to eat out in the fields. In the mid-1880s, a jug of beer and a loaf of bread constituted the meal of a scythe-swinging peasant woman whom Lee Meriwether accompanied to fields three miles distant from her home in southern Germany (a “loss of comfort and health,” he noted of the distance to work).¹⁰ Although the urban working class also had to eat outside the home, “town life had certain advantages over the countryside, especially a great number of small shops, where tiny quantities of essentials like bread, cheese, tea and sugar could be bought on a daily, even meal-to-meal, basis according to resources.”¹¹ An early twentieth-century researcher (Robert Coit Chapin) according to historian Kathleen Leonard Turner, “carried out budget studies in New York in 1908, [and] calculated that 42% of the 318 workers families studied took some meals away from home.”¹² Thus, to do certain forms of labor, others increasingly needed to provide services to feed these laborers. What in earlier eras was primarily the everyday provenance of royalty and landed gentry—to have other people cook and serve you—by 1880 was increasingly available to people at all levels of social and economic hierarchies. These social and economic changes created new forms of kitchen work, new kitchens, and new ideas about who could make food good or desirable.

The availability and necessity of cooked food outside the home started a long-term shift in the link between food and gender: women’s roles as the primary cooks and bakers, and the home as the primary site for kitchen work started to be associated with ideals of domesticity as much as necessary practice. Cooking is labor widely understood to be women’s work, as linked to biology as it is to culture. The daily responsibility for food

production remained strongly associated with gender in all modern societies: urban and industrial, west and east, north and south, rural and agrarian, hunter-gatherer. Even as the organizations of societies were transformed, this association remained. However, from a historical perspective, as the *daily* burden was no longer exclusively the responsibility of individual women, many new associations between cooking and identity were also generated. Commercial kitchen work has long involved both women and men, and thus other ideals beyond domesticity emerged to inform cooking practices, such as quality, aesthetics, efficiency, health, and mastery. The conflict between such values is clear in Auguste Escoffier's comments in an 1895 speech that "man is more thorough in his work, and thoroughness is at the root of all good, as of everything else. A man is more particular over the various little details which are necessary to make up a really perfect dish... A woman, on the other hand, will manage with what she has handy." Escoffier goes on to say, "[t]his is very nice and obliging of her, no doubt, but it eventually spoils her cooking, and the dish is not a success."¹³ Escoffier, the professional chef considered instrumental in creating the modern restaurant kitchen, chose to identify *multiple* definitions for the relationship between food and gender.

COOKS, KITCHENS, AND DINING ROOMS AS CATEGORIES

To fully understand the increasingly fluid nature of domestic versus commercial economies as the sites of kitchen work during this period, it is necessary to consider the category of the domestic servant. The employment by households of other people to do domestic tasks, including cooking (Meriwether observed a job market for male and female cooks in Florentine villas during the 1880s),¹⁴ was long dominated by what is now called the *service economy*. This happened at all levels of social hierarchy in numerous geographic regions, certainly in Europe, but also in South and East Asia, North, and South America. By 1900 in England domestic service was the largest female occupation and remained so until after World War II. Many of these women were in charge of running the kitchen and feeding their employer's family, and were often seen as the implementer of the vision of the lady of the house, thus competent, but not necessarily expert.

For example, educational reformer Catharine Beecher's *Housekeeper and Healthkeeper*, first published in New York in 1873, reveals the importance of the domestic servant to the proper functioning of middle-class American households. This was the last in a number of books published by Beecher extolling the importance of "domestic economy," including *A Treatise on Domestic Economy* (1841) and *An American Woman's Home or Principles of Domestic Economy* (1869), co-authored with her well-known sister, writer and abolitionist, Harriet Beecher Stowe. Her introduction begins with the classic, so-called separate spheres ideology of the time: "God made woman to do the work of the family, and to train those under her care to the same labor."¹⁵ The first half of the book concerns cooking and keeping a well-stocked larder, with numerous recipes for food that promotes health. The second half extends to a broader consideration of the complex skill and knowledge required to effectively run a "modern" household, and as Beecher states, "Not the least of the onerous jobs of a housekeeper is the training and government of *servants*, of all kinds of dispositions, habits, nationalities and religions."¹⁶ In *Care of Servants*, a chapter specifically addressing domestic servants, Beecher decries the complaints of middle-class women of the exorbitant demands of domestic servants, arguing that the problem is a dearth of practical knowledge and good supervision skills. The privilege of middle- and upper-class means was the ability to have someone else do the cooking (and cleaning, and laundry). The domestic servant, according to Beecher, just needed the proper guidance and training in how to best do kitchen work, and that was the job of the woman of the house.

British novelist Virginia Woolf employed a domestic servant, Sophie Farrell, from 1916 until 1934, who formerly worked for her parents as a cook-housekeeper. Farrell came to work for the Stephens family (Woolf's parents) in the 1880s, meaning she was employed by members of that family for fifty years. She came to the Stephens' household with some previous experience, but she did not have any professional training and, thus, in the parlance of the day, was called a *plain cook*, expected to "turn out three meals a day if needed, bake bread, scones and cake for tea, and cope with the family's entertaining."¹⁷ In her diaries, Woolf reveals a dual sensibility towards Sophie. On the one hand, having someone else to do the cooking and cleaning was simply the expectation for both older and younger members of the Stephen'

family. Woolf, and her sister Vanessa Bell, often wrote to each other in frustration about their domestic servants and their own roles as supervisors. On the other hand, Woolf revealed real sensitivity to the shared and dependent relations of women during the Victorian and Edwardian periods, asking in *A Room of One's Own*: "Is the life of the charwoman who has brought up eight children of less value to the world than the barrister who has made a hundred thousand pounds?"¹⁸ The complex question of who *owns* the identity and the labor of the cook and the social significance of this labor is a leitmotif during this entire historical period.

In colonial contexts, Europeans counted on the ability to hire and use numerous domestic servants to take care of household duties, and these relationships were important to the articulation of social status for both colonizer and colonized. As Elizabeth Collingham points out in *Curry: A Tale of Cooks and Conquerors*, during the height of the East India Company:

the servants would be ready to expire with shame at their master's disgrace if the number of dishes were reduced, or smaller joints of meat and refinement for the vulgar splendor of the burra khana [big dinner]. Indian servants certainly collaborated with their masters' and mistresses' efforts to display their wealth on their tables. The status of their employers had a direct effect on the servants' own standing in the Indian social world.¹⁹

Although during the British Raj some of the earlier conspicuous displays of food and extensive numbers of servants were scaled back, the assumption in India remained that cooking was done (as in the case of middle- and upper-class Americans and Britons), by other people, well-supervised.

Jean-Robert Pitte argues that beginning with Louis XIV's reign, the French aristocracy sought to emulate the elaborate culinary productions of the monarchy. Although there was a long tradition of *traiteurs*, or caterers, who had their own guild, the aristocracy "preferred to employ their own *mâitres d'hôtel* and *cuisiniers*."²⁰ These domestic servants were trained by long-term apprenticeship and protected by trade guilds. If a cook reached the higher ranks in the kitchen hierarchy of a large enterprise he was also highly paid. The *mâitre-cuisiniers* (head chefs) in these households were powerful both inside and outside the home. Antonin Carême, widely

considered one of France's great chefs and early culinary authors (he published a number of books including *Le Cuisinier Parisien ou L'Art de la Cuisine Française au Dix-Neuvième Siècle* [1828]), worked exclusively in the homes of European aristocracy, including the French diplomat Talleyrand, the Rothschild banking family, and the Prince Regent of England. But by the late nineteenth century, with the rising importance of commercial food production and the emergence of new social elites, including, but now beyond the aristocracy, many cooks and chefs moved out of domestic service and ultimately sought employment in restaurants and other fine dining establishments, to a limited extent before 1850 in a small number of cities such as Paris, London, New York, Geneva, and Brussels, and on a sizeable scale after 1870 all over the world.

The late nineteenth and early twentieth centuries were therefore a period of expansion of service labor into public institutions such as restaurants, taverns, and inns. The necessity and availability of transportation allowing people to travel long distances, whether it be for leisure, work,



FIGURE 6.2: Modern restaurant kitchen, c. 1860: space and air were otherwise rare, so the kitchen of the Café Riche in Paris is the exception rather than the rule (Roger-Viollet, Paris).

war, or other reasons, created another set of reasons for procuring food from people and places, in this case outside of their known world. All these public locations for purchasing and (most often) also consuming food now required cooks and other staff: cooks with some level of training and some level of paid compensation for their labor. Where were these new jobs? Commercial kitchen work by 1880 was firmly entrenched as part of commercial enterprises in urban areas. Paris, which in 1900 had a population of almost two million had, “1,500 restaurants, 2,900 hotels, 2,000 cafés and brasseries and 12,000 wine merchants (of which 75 percent offered food).”²¹ The density of urban areas, the often cramped living quarters, and the lack of ready access to arable land conspired to make cities around the world natural sites for public cooking and eating.

The modern restaurant emerged from the shops of French *traiteurs*, or caterers, long-time members of the trade guild system throughout Europe. *Traiteurs* sold prepared food at their shops but would also cook off-site for special events. Members of this guild (the *métiers d'alimentation*, including the cook-caterer part of the guild system, were exclusively male) developed the modern restaurant, combining a long-standing tradition of *commercial food production* with the relatively new phenomenon of *public food consumption*.

The other locations for hotels, inns, taverns, and ultimately restaurants were travel and tourist destinations, increasingly an intrinsic part of modern life. The rise of industrial manufacturing and the concomitant rise of population in towns and cities where manufacturing jobs were located created an interest in rural tourism as an antidote to the difficulties and dirtiness of urban environments. This generated new, temporary migrations, “[w]hen late nineteenth-century consumers grew uneasy with the world they had helped to make, tourism offered an escape from that world.”²² In New England, these migrations could last for a few days, several weeks, or the entire summer: “during the 1890s between fifty and sixty thousand visitors were in Vermont each summer, and...there were as many as 650 hotels, resorts, boardinghouses, and farm boarding places.”²³ Earlier taverns primarily served business travelers, but over time urban tourists became the primary guests at the bed and breakfasts, inns, and resorts that increasingly defined village centers, towns, and vacation destinations.

Luxury hotels and resorts developed in the nineteenth century as more than places to rest or stop during journeys, but rather as destinations. Initially

these grand buildings with full dining rooms and large kitchens were found in locations where the wealthy could “take a cure,” but by the 1880s such enterprises were found in urban areas too.²⁴ The Savoy Hotel in London was an important early example of an urban luxury hotel, especially in terms of a new emphasis on fine dining and exemplary service. The Savoy Hotel is also where the general manager César Ritz and the chef Auguste Escoffier perfected the hotel dining room as an elite destination by focusing on preparing haute cuisine cooked by trained cooks and chefs. In fact César Ritz made acquaintance with the developer of the Savoy Hotel, Richard D’Oily Carte, when Ritz was working in the spa town of Baden-Baden, Germany where D’Oily Carte was “taking the waters.”²⁵ The integration of sumptuous lodging with fine dining became a new and popular model, migrating to all the Ritz-Carlton Hotels, which by the late nineteenth century were found in such far-flung locales as Budapest, Rome, Buenos Aires, and New York.

GUILDS, APPRENTICESHIPS, AND THE LABOR OF COOKING

Commercial kitchen work expands by every means possible, sometimes with a genealogy harkening back to the elite beginnings of the invention of the restaurant in late-eighteenth-century Paris, but as often by committing allegiance to the older traditions of street food, such as the Chinese street hawkers: “the simplest of these sold noodles by the bowl or hot biscuits (shao ping) and Chinese donuts (yu t’iao) [and] watermelons.”²⁶ These cooks were often migrants into urban areas, as was the case in Philadelphia, where street vendors often sold foods from home, such as “pears stewed with molasses, coconut cakes of West Indian origin, oyster fritters, pepper pot soup and ginger cakes.”²⁷ Often vendors would prepare foods in domestic quarters, but some vendors would hawk the wares of foods prepared in nearby shops.

In Europe, kitchen work in the commercial realm was initially organized around guilds, emerging from the medieval period as a means of creating standards and benefits for craftsmen engaged in the same line of work. London’s Worshipful Company of Cooks became a recognized guild in 1311 and there is evidence of a cooks guild in France by the late 1500s. Interestingly, *traiteurs* who owned shops and *maître queux* and *cuisiniers* who worked in the homes of the aristocracy were part of the same guild.

Both groups became workers in public institutions after the French Revolution, when guilds were abolished and many of the aristocracy fled and lost their homes. The post-revolutionary era in France and beyond also witnessed the expanding need for locations to purchase food prepared by others and thus for kitchen workers. In England, taverns were joined by pubs and restaurants. These sites catered to different social classes and correspondingly made different types of food for patrons.

Densely populated cities such as Paris witnessed a florescence of businesses involved in making food for urban citizens of greatly varying socio-economic status. In nineteenth-century Paris many experiments in commercial cooking were launched with relative levels of success. *Les Etablissements Duval* (founded by Baptiste-Adolphe Duval) were expressly created to meet the needs of Parisians of more modest means.²⁸ From the founding of his first restaurant (the Duval family ended up owning fifteen by the 1880s), Duval sought to combine innovative approaches to organizing kitchen work with more streamlined and less costly means of serving food to Parisians. He set up shop in large venues; his first restaurant had formerly been used for concerts and balls. He created an open kitchen in the center, attempted to implement new steam technology to cook roasts and chops, and offered fresh seltzer water at every table. The steam technology was adopted to address the real problems of heat and smoke in most kitchens of the time given their reliance on coal as a primary heat source. Although Duval had to abandon *cuisine à la vapeur*, his vast restaurants relied on a complex compartmentalization of work, with separate rooms, buildings, and workers dedicated to baking, laundry, butchery, beverages, and cooking the soups and meats that made Duval's establishments ultimately so successful. In effect a vertically consolidated business, the butchery and baking were part of the enterprise of feeding customers at the restaurants that spread throughout the arrondissements of Paris.

Other labor, allied with kitchen work, was vital to the emergence of a commercial food system. In Europe, the food trades and guild system involved cooks, bakers, confectioners, butchers, and others. In earlier periods, these artisans worked primarily as small shopkeepers, but by the late nineteenth century this work became centralized, due in some part to new technological innovations such as refrigeration, but also because of greater state involvement in overseeing these burgeoning activities for the

adequate provisioning of urban populations. In the early twentieth century there were approximately 350 butchers working in La Villette, now the central site for animal slaughter and butchering to provision Paris and the environs. This was considered skilled labor and an apprenticeship was *de rigueur*. As historian Claflin describes, “These skilled men manually performed every aspect of the slaughter and preparation of the carcass during the course of the morning, taking about half an hour for each steer carcass: removing the skin and all the internal organs, detaching the back half, removing the head, and cutting the animal in half again lengthwise.”²⁹ This work allowed chefs, domestic servants, and housewives access to fresh meat that could be, in turn, transformed through another level of kitchen work into the daubes, escallops, *navarins*, and terrines so important to the French bourgeois and haute cuisine.

During the nineteenth century the modes involved in preparing food in an individual, free-standing restaurant, the larger space of a grand hotel, and other similar public settings catering to elites were dominated by the French standard of professional kitchen organization. This was particularly strong in public milieus with an investment in communicating messages about social status, although the French standard could be seen operating in some form in kitchens serving food to both high- and low-class establishments. London’s private clubs, for example the Reform Club, were run by French chefs serving French haute cuisine throughout the nineteenth century and into the early twentieth century. Banquet menus from 1900–25 reveal the French influence: *tortue Claire*, *selle du mouton*, *faisans rôtis*, and so on. This emphasis was more than naming dishes with French terms—these dishes were made by the French: “[In] 1890 there were five thousand French chefs involved in all forms of elite cookery in Britain.”³⁰

In this model of kitchen organization, adequate professional performance is associated with the mastery of a set of cooking techniques and methods. These techniques and methods emerged in France first in the large kitchens of the royalty and became a standard of practice that moved to urban public restaurants; first in Paris and then in urban areas around the globe. A 1906 review of a New York restaurant attributes the success of the establishment to the French connection: “Each year, at the firm’s expense, the chef is sent abroad [to France] in the interest of cuisine in general and to imbibe any new ideas that the French kitchen may present.”³¹ By 1920 the

famous New York City restaurant, Delmonico's, had been in continuous operation for almost a century, serving dishes such as *macaroni à l'Italienne* and turtle consommé. The food served at these sites clearly needed to fulfill certain social expectations: Delmonico's regularly served the so-called Four Hundred, members of New York's elite families, during the Gilded Age, and was a frequent stop for Broadway actors and actresses, and even early Hollywood movie stars. Aesthetic expectations, both sensory and visual, were at the foundation of the ingredients, techniques, and methods disseminated through the overall organization of kitchen work in these settings.

As the guild system became less functional as a primary means of training and standards, some trade groups emerged to perform such functions. By the 1860s those involved in *métiers d'alimentation* or food trades began to organize, focusing on creating professional associations and journals. For elite chefs and cooks, this form of organized kitchen work was notable for the allegiances *across* national boundaries, given that the hotels and restaurants where they were employed were found in urban and resort areas all over the globe. The *Société des Cuisiniers Français*, founded in 1879 and headquartered in Paris, had branches in New York and London.

Thus, with the coming of the modern restaurant, the fame of French cuisine only grew. Skills were learned on the spot, in the kitchen, preferably in renowned Parisian *maisons*.³² Apprentices and trained cooks obtained employment via word-of-mouth information or via innkeepers with knowledge of the job market. Newspapers published job advertisements, and from the 1860s on, unions, such as *La chambre syndicale des ouvriers cuisiniers de Paris* (1872), organized the coming-and-going of restaurant staff.³³ Right from the beginning of the modern restaurant, the labor market for cooks and waiters was international. Cooks (and waiters) travelled to the leisure centers, such as Paris and London in winter, or Nice and Geneva in summer. Eventually they returned to their home region, applying their know-how of fancy cooking.³⁴ French chefs travelled abroad too. They were to be found in Berlin, London, Milan, Moscow, and New York and, somewhat later, in Buenos Aires, Delhi, and Cairo.³⁵ Not all of these cooks and waiters worked in top restaurants; most of them had a job in what travel guides labeled "Second and third category."³⁶ And not all copied the French cuisine perfectly, whether due to incompetence or the will to adapt to local tastes.³⁷

Cooks and chefs of this era, albeit in France or other locales, shared the concerns of other artisans: the increasing impact of industrialization on their practice and the subsequent loss of their status as craftsmen and artisans. During the 1880s and 1890s there was a push to organize beyond the predominant mutual aid societies and to embrace the growing union movement found throughout Europe. In France, a *Chambre Syndicale des Cuisiniers-Pâtissiers* was founded in 1884 that wanted to attain state sanctions to “improve the working conditions of all men working in professional kitchens.”³⁸ Some of the desired sanctions included improving the working conditions in kitchens, especially lighting and ventilation, as well as mandating one day off a month for all cooks.

The physical environments of commercial kitchens, whether a small fish-and-chip shop or the Savoy Hotel, were rarely given much thought or investment, and thus working conditions were generally harsh, especially before the advent of gas ranges and ovens, and organized venting systems. Gas stoves were being lauded by professional chefs, for example by Alexis Soyer of London’s Reform Club in the mid-nineteenth century, but commercial kitchens do not appear to have fully replaced the traditional coal-fired ovens and ranges until the 1890s. Although the benefits of gas over coal for improving the heat and smoke in kitchens were long acknowledged, concerns over the quality of the food, unclear implications for the organization of labor, and the added costs created strong resistance.³⁹

Cooks often suffered from long-term arthritic and respiratory ailments. George Orwell provides a vivid account from his own experience working in a Parisian hotel during the 1920s: “The kitchen was like nothing I have ever seen or imagined—a stifling, low-ceilinged inferno of a cellar, red-clanging of pots and pans.”⁴⁰ The everyday work of a commercial cook was not just difficult but often dangerous due to the poor conditions of professional kitchens.

The author of a biography of Antonin Carême attributed the great chef’s long illness and eventual death in 1833 to “occupational low-level carbon monoxide poisoning” from spending so much time over coal-fired stoves in small poorly ventilated kitchens. Even though Orwell’s experiences were in kitchens with primarily gas stoves, the general organization of work was little changed from earlier epochs. He writes: “I wish I could be [Emile] Zola for a little while, just to describe the dinner hour. The essence of

the situation was that a hundred or two hundred people were demanding individually different meals of five or six courses, and that fifty or sixty people had to cook and serve them and clean up the mess afterwards... The chargings to and fro in the narrow passages, the collisions, the yells, the struggles with crates and trays and blocks of ice, the heat, the darkness, the furious festering quarrels which there was no time to fight out—they pass description.”⁴¹ In fact, although new technologies such as gas and electricity improved some elements of kitchen work, the pressures of commercial enterprise meant that in many ways cooks and kitchen workers of all types had to work harder and faster than Carême and others who worked in private residences. In his memoir, Auguste Escoffier comments, “I myself have often been forced to make profound changes in my restaurant service to meet the needs of the ultra rapid pace of modern life. For instance, I have had to eliminate pedestals and invent new, simplified ways of laying out and presenting dishes. To do this, I have even had to invent new restaurant equipment.”⁴²

Unlike other trades, though, those cooks and chefs involved in producing food in small-scale public settings still retained artisanal control over food production, since this style of consumption revolved around seated diners expecting a meal served to them, often to order. This meant that most cooking tasks remained as *handwork*. Although some forms of food production were becoming mass manufactured such as savory and sweet condiments, this remained complementary rather than central to kitchen work during this period. Until the mid-twentieth century such mastery was primarily disseminated through a system of apprenticeships, where young men (generally between 14–16 years old) worked to learn by doing low-level employment in restaurants and hotels, and gradually working their way up the kitchen hierarchy. Ultimately, the type of establishment where a young boy started his apprenticeship influenced his career in kitchen work: training at a local pub did not teach the same skills as, in the case of Gabriel Tschumi, Queen Victoria’s royal kitchens. The main principle of the apprenticeship, learning by doing, was, however, equally applicable. In Tschumi’s case, “I spent a good deal of my time watching how things were done, working for a fortnight at a time with the various departmental chefs.”⁴³

The organization of the modern public kitchen was heavily influenced by the work of Auguste Escoffier, credited for developing the *brigade* system,

which broke down cooking tasks in a fairly linear fashion, something akin to the modern assembly line. He developed his ideas working with Cesar Ritz in the 1880s and 1890s as the Ritz hotel chain expanded throughout Europe, North America, and Asia. By 1920 Escoffier's system became the standard operating procedure in restaurants, hotels, clubs, and even on cruise ships. Apprentices would start their sojourn in the professional kitchen by doing scullery work: this included washing and peeling fruits and vegetables, stoking coal fires, and doing dishes. If deemed worthy of taking on more tasks, an apprentice could move to *garde-manger*, or cold prep work, eventually moving up to work at the stove, preparing the final dishes for the customer. Although the apprenticeship system remains an inviolable aspect of kitchen training for elite settings, vocational culinary schools became an alternative method of obtaining culinary mastery after 1920.

COOKBOOKS, GASTRONOMES, AND JOURNALS

The long-term shift in the definition and practice of kitchen work to the present range of possibilities, both inside and outside the home, led to new meanings and values associated with this form of labor. The discourse around kitchen work has historically been marked by a divide between domestic and public spheres. And as many food scholars have pointed out, traditionally, most kitchen knowledge was orally transmitted, passed on from mother to daughter, or from chef to apprentice.⁴⁴ Thus, food talk has historically mimicked the connection of cooking to gender, as seen in Catharine Beecher's admonitions to her readers, assumed to be women, and Escoffier's assertions about male versus female approaches to cooking.

The increased organization of cooks, chefs, and other staff working in the public sphere between 1880 and 1920 involved a new and powerful form of food talk: specialty journals. The rise in literacy and innovations in printing and publishing enabled culinary workers to create new forms of communication for both internal (fellow professionals) and external (the consuming public) parties. Although there is an earlier history of gastronomic journal writing, notably Alexandre Grimod de la Reynière's *Almanach des Gourmands* (1804–1812), culinary professionals did not adopt the genre until the 1870s. Between 1870 and 1900, 12 culinary journals were founded in France and at least another 10 in Britain and the United States.

The journals for the consuming public were primarily instructional, and in France included *Le Pot-au-Feu*, *Le Gourmet*, and *Le Cordon Bleu*, and in the United States, the *Epicure*. Articles were often written by chefs to help women master cooking skills; in *Le Pot-Au-Feu* during the 1890s each issue started with a class taught by chefs August Colombié or Charles Driessens. The journals for culinary professionals did include exchanges of recipes and menu ideas, and reviews of culinary expositions and competitions, but primarily focused on the promotion and preservation of their labor. *L'Art Culinaire*, the journal for French chefs, concerned itself with the importance of French haute cuisine as the standard-bearer for culinary excellence in hotels and restaurants around the globe. *Le Progrès Gastronomique* was published under the auspices of the trade union, *Chambre Syndicale des Cuisiniers-Pâtissiers de Paris*; a British version was *Food and Cookery and the Catering World*. This journal also articulated the importance of culinary standards and the improved status of the profession but was more overtly political in tone than *L'Art Culinaire*. The food talk of this period assumed a divide between domestic and commercial domains: “these journals created an ‘imagined community’ of like-minded readers, some in search of a social identity, some in search of a professional identity.”⁴⁵ So although the specific events covered in these journals varied, and the life cycles of these journals differed greatly, the long-term structural shift to dual forms in kitchen work was revealed and reinforced by such food talk. During the twentieth century this became increasingly marked, with professional kitchen workers increasingly dominating both the discourse and practice of cooking around the globe.

CONCLUSION

The end of the long nineteenth century was a period characterized by kitchen work and food talk responding to the changing organization of modern life, especially population shifts from rural to urban areas, and new technologies and the organization of labor. In everyday terms, such shifts allowed for more people to make a living feeding others, perhaps purchasing a bowl of pepperpot soup from a West Indian woman selling on a street corner, or perhaps sharing a sumptuous, six-course banquet at the Savoy Hotel. These shifts have only broadened and deepened in the contemporary period.

CHAPTER SEVEN

Family and Domesticity: Food in Poor Households

ANNA DAVIN

Much is now known about the larger patterns of food consumption in Britain in the nineteenth and twentieth centuries.¹ Food was always a major item of expenditure, particularly for the working classes. In the second half of the nineteenth century it became cheaper.² Improvements in transport (railways and steam trawlers, for instance) and in preservation (especially canning, and the use of ice and refrigeration) extended the range from which basic foodstuffs could be brought, at the same time as the rapid expansion of the British population and the shift from country to town, and from agriculture to other forms of production and employment meant that Britain could only feed its population by expanding imports. The retail price of food for a statistically typical workman's family fell by thirty percent between 1877 and 1887, both because of imports and

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This chapter was originally published as "Loaves and Fishes: Food in Poor Households in Late Nineteenth-Century London," *History Workshop Journal* 41 (1996). Section headings have been added to the version published in this volume. Reproduced courtesy of Oxford University Press.

through reductions in taxes, for instance on tea.³ But this improvement was not maintained: the purchasing power of the pound declined markedly between 1896 and 1912.⁴ Moreover, by no means did all real households conform to the typical: they did not necessarily have a male head; and if they did, he was not necessarily able to provide consistently and adequately for a family. Irregular employment and unemployment, illness and disability, or a high ratio of dependents to earners in the household all spelt periodic or long-term poverty. For the third to a quarter of people in Britain at the turn of the century calculated by Rowntree and others to be living in poverty, with ‘earnings...insufficient to obtain the minimum necessities for the maintenance of mere physical efficiency’,⁵ it was a struggle to stretch the weekly money far enough to feed all mouths in the household.

If overall trends and national per capita figures obscure the realities of consumption for particular groups, they tell us even less about the preparation or distribution of food, and about its cultural meanings. My aim here is to explore how the poor in London negotiated poverty and its restraints, and to look at the consumption of food in terms of practices and relationships, rather than statistics. I therefore draw heavily upon the qualitative evidence provided by autobiographies and oral histories. Since this research was part of a larger project on childhood and everyday life among the poor in late nineteenth- and early twentieth-century London, the focus is upon children’s food—what they ate, how it was procured and prepared, when they ate it, where, and with whom.

MEALS

The daily family meal, eaten by all the family together, was not a universal practice. It went with regular working hours and a regular income (or with the memory of these and the hope of their return), with adequate cooking facilities, and with sufficient utensils, space, and furniture for everyone to be accommodated at once—conditions which often could not be met.⁶ Quite commonly there would be only one major cooked family meal during the week, often cooked in the baker’s oven and collected when done. A skipping rhyme celebrates this weekly feast:

Bread and dripping all the week
Pig’s head on Sunday

Half a crown on Saturday night
A farthing left for Monday.⁷

During the rest of the week, 'a unanimous breakfast' was out of the question, because 'some go to work at 5 A.M., and others may not be due till 9 A.M.'. Most workers did not come home for lunch, even though school-children often did (especially if there was a home-based mother); and tea-time was 'a running series of untidy meals', as members of the household returned at varying times from school, work and the pub.⁸ (Today's breakfast habits are often comparable.) There might in some households be soups or stews or (on Monday at least) left-overs, not necessarily eaten by everyone together. But bread was in many cases the solution.

Bread was the children's staple. It was mainly eaten in thick slices known as *doorsteps*, smeared thickly with cheap jam,⁹ treacle, margarine,¹⁰ butter (if times were good), or dripping. (This might include meat juices and was bought from the butcher or brought home as a perk by cooks and other servants, or obtained free from the kitchens of large institutions like hospitals.)¹¹ As Maud Pember Reeves pointed out, bread had many advantages:

Bread...is their chief food. It is cheap; they like it; it comes into the house ready cooked; it is always at hand, and needs no plate and spoon...they never tire of it...They receive it into their hands, and can please themselves as to where and how they eat it. It makes the sole article in the menu for two meals in the day [breakfast and tea].¹²

Children's main drink was 'tea, with a slight colouring of milk', according to settlement worker Alexander Paterson in 1911.¹³ Fresh milk could sometimes be bought from neighbourhood cowsheds, though they grew fewer,¹⁴ but many families used condensed and sweetened milk from a tin, as it was much cheaper.¹⁵ Weak beer was still drunk with some meals, but temperance pressures and increasing costs encouraged the shift to tea instead, especially for children and women. Cocoa was commonly served at charitable breakfasts and dinners, and sometimes also in the home. One mother (of an eight-year-old, a five-year-old, and a suckling baby) bought a quarter of a pound a week of both tea and cocoa, and explained: 'The cocoa I have for myself as I cannot afford beer and another thing I do not want it as I have found it brings unhappiness to a home'.¹⁶

Tea and bread were supplemented by cheese and various kinds of food bought ready to eat: shellfish, fried fish and potatoes, smoked or dried fish, faggots, pease pudding, and saveloy sausages were all popular. Or ‘the hard-worked saucepan and frying-pan’¹⁷ would be used to prepare potatoes (another important staple), or for eggs, bacon, soup, or sausages and, when finances allowed, a bit of fish or meat. Fresh fish became more widely available from the 1860s, with increased use of ice and faster transport; this was one factor in the growing popularity of fried fish and potatoes and the proliferation in poor neighbourhoods of the shops which sold them.¹⁸ The development of refrigeration and canning, as well as the transport revolution, also made cheaper meat available, imported from the US, Argentine, and Australasia.¹⁹ But canned meat was unappetizing and slow to gain acceptance in spite of being cheap; moreover, it had no bones for soup.²⁰ An appetizing stew could be produced with fairly small quantities of meat, eked out with plenty of vegetables (potatoes above all, onions, carrots, and turnips) and perhaps pearl barley, or suet dumplings. The meat used was often of dubious quality. For a ‘mixed dinner’ in one poor Hoxton family a child would be sent out for ‘six pound of potatoes, one pound of onions and a pound and a half of “back fat”,’ which would ‘come to about fivepence’.

Mum would then cut the fat into small pieces and fry it, mash up the potatoes, pour the fat in the middle and mix the lot up. Small pieces of onion would then be fried brown and these she would mix in also. We would then have a plateful each and we really felt we had had something to eat.²¹

COOKING

In many tenement homes any cooking was done on an open coal fire, its usefulness only sometimes extended by an adjacent oven and hob. Ground-floor apartments included a kitchen, however, as well as direct access to the yard with tap and lavatory and perhaps a washhouse with a copper for the laundry. This was why the ground floor cost more and was preferred. But whatever the facilities for cooking, they were not likely to be efficient.

The certainty of an economical stove or fireplace is out of the reach of the poor. They are often obliged to use old-fashioned and broken

ranges and grates which devour coal with as little benefit to the user as possible. They are driven to cook by gas, which ought to be an excellent way of cooking, but under the penny-in-the-slot system it is a way which tends to underdone food.²²

Tommy Morgan, born in 1892, who grew up in a succession of one-room homes around Blackfriars, recalled that a pennyworth of gas lasted five hours—but ‘it was very rare we had a gas stove. Always had a coal fire. Everything on the one fireplace.’²³ His mother also had a Dutch oven, which allowed them to roast and bake over the fire.²⁴ Oil stoves were sometimes recommended, but were rare compared with the almost universal oil lamps. Open fires were what most people used. They were expensive and inconvenient for cooking, especially in summer when their warmth was not welcome; and tending them and cleaning up the dirt they caused was laborious; but they did allow easy disposal of most refuse,²⁵ and the costly coal could be supplemented by anything combustible which roaming children spied and brought home.

Much depended on the skills, energy and resourcefulness of mothers. Some could make a very little seem tasty and almost sufficient, usually in soups and stews, remembered with gusto even in old age.

Mum made a damn good stew out of sixpennyworth of breast of lamb. And every Wednesday she’d make a meat pudding in a pudding basin. ‘Can we have a bit more?’ we used to say and mum would say ‘This isn’t a stew, you know, you only have one lot of gravy each’.²⁶

Some had advantages. In a family whose mother worked as a cook: ‘as things was a bit tight we mainly lived on what mother brought home from... the restaurants where she cooked. So we always lived well on the pieces—the scraps that... she brought home.’²⁷ Some mothers made steamed suet puddings (sweet or savory), which were tasty and filling. An 1890s’ mother of eleven, married to a coachman, used to make ‘a big suet pudding with meat and vegetables and a milk pudding or pastry with apples’ ready for her brood when they came home from school for dinner.²⁸ Such puddings were enthusiastically recommended by apostles of domesticity.²⁹ But they required skill, preparation time and long cooking, often beyond available domestic resources.

Many mothers lacked time and perhaps the skill to cook, as well as the facilities.³⁰ When Charlie Chaplin's mother gave in to his pleas for a home-cooked Sunday dinner (she had won on the horses so felt she could afford it for once), she bought a five-pound lump of meat labelled 'For Roasting' and got the landlady's permission to cook it in her oven downstairs. But she was too shy to disturb the landlady by going in to check on its progress. She misjudged the timing (and probably the quality of the meat), so when she served it up the joint 'had shrunk to the size of a cricket ball'.³¹

Some mothers objected to ready-cooked food. Uncertain quality could be the reason, as with a poor hardworking ex-tailoress in St Pancras in 1910, who didn't believe in buying cooked things 'as you never know what you are getting'.³² Home cooking could also be bound up with identity. For the mother of Hymie Fagan (born in Stepney in 1903), her domestic competence was at stake. He first ate food which wasn't home-cooked when he was ten and was taken for lunch to Lyons:

It was my first restaurant meal, not only because we were too poor to have gone anywhere except to a fish and chip shop or a salt-beef counter, but because my mother had a horror of what she called 'cookshops'. What sort of a housewife was it, she would cry, who didn't cook a meal for her husband and family? The idea that it might be enjoyable and a nice break never entered her head. I could not understand her objections. I used to pass a 'cookshop' on my way to school...and the emanating smells were delicious, while the large plate of fish displayed in the window looked as good as mother's.³³

Home cooking was also a way to maintain a distinct cultural identity, as with the different Jewish groups of the East End: Lithuanian, Polish, Russian and English Jews each had their own cooking style.³⁴ There was also some cross-fertilization, however: from the delicious way a Hoxton mother fried fish for a meal with her sisters on a Friday ('You'd think we was all Jews, to tell you the truth'),³⁵ and from the taste for matzos acquired by the mother of an eleven-year-old 'Sabbath goy' when he brought them back.³⁶

PROVISIONING

Women bought a wide range of offal and other parts rejected by the better-off, which today go into tinned pet food. As Arthur Newton wrote of his parents' childhood in the 1880s,

In those days they could buy pigs' tails at two pence for a whole lot, or marrow bones, and these things were stewed and made into soup and that was good nutritious food, but cheap.³⁷

Marie Welch's mother sold liver, tripe, oxtail, trotters, sheep's heads, rabbits, sausages, brawn, and dripping from her stall outside the Britannia Theatre, Hoxton. (The sheep's heads were ready cooked, and theatregoers would pick the flesh off them on their way in.)³⁸ Mothers were also adept at finding when and where food might be sold off cheap. 'Broken food' was bought at 'some of the great London restaurants', and 'trimmings' of meat and fish at certain big butchers' and fishmongers' shops'.³⁹ Children queued up for yesterday's unsold bread, or bruised fruit, and watched for bargains or anything free.⁴⁰ Bessie C.'s mother, in Bermondsey in the 1890s, used to send her to get cracked eggs from a packing place nearby; bullock's cheek from the skin market; and, from Leadenhall Market in the City, fish and fruit bargains reduced because they wouldn't keep.⁴¹

...just over London Bridge there was Leadenhall Market. Go over there in the afternoons, cos there was no fridges then so the fish that was left—you could get a bagful for 3d....we'd get the best of the fish, where they [artisans]'d be buying the cheapest...

Mrs A, whose widowed mother, a hotel laundryworker, brought her two children up in Waterloo in the 1900s, used to go for yesterday's bread to a baker in Covent Garden, or for giblets to a Jermyn Street butcher ('Mother would stew them—lovely job to chew through them, they were lovely'.)⁴² or they would have bacon bones stewed up, with 'half a loaf and a ha'porth of milk and some butter'.⁴³ Arthur Harding's father used to get a ticket from the Mission entitling him 'to go round the restaurants to see what they would give him in leavings'—not just scraps, but sometimes half a leg

of lamb or a ham-bone: ‘food that was good to look at and good food for a hungry family’. (Arthur hated going with him to carry the bag; he detested cadging for food and ‘would sooner have pinched it’.)⁴⁴

Street markets in poor neighbourhoods kept prices down. The costermongers distributed ‘the surplus remaining unsold in the authorized markets’, and were, according to a report in 1893:⁴⁵

keenly alive in ascertaining when produce is at exceptionally low prices, and...always ready to purchase and distribute an almost unlimited quantity when that is the case. By this means the humble customer is frequently able to purchase food at a lower price than it has been quoted wholesale at the authorized market, as the costermonger...[can] resell his goods at very low profits, his expenses being small.

Vegetables were the most important item sold in this way. Out of 5,292 stalls in 112 markets around London, 1,423 sold vegetables, while the next largest categories, in order, were of stalls selling fish (475), flowers (432), fruit (369), and ‘provisions’ (292).⁴⁶ Saturday was usually the busiest day, and the experienced Saturday night shopper waited just long enough for the prices of meat and other perishables to drop without everything worthwhile having been sold already.⁴⁷ A handful of markets also did extensive trade on Sunday morning: the largest London street market, ‘essentially Jewish’, held in Wentworth Street, Middlesex Street and Goulston Street (today’s Petticoat Lane); the nearby East End markets of Brick Lane and Bethnal Green Rd; and, in South London, East Lane and London Road.⁴⁸

Some households managed to supplement bought food through cultivation or breeding, often the man’s preserve.⁴⁹ The green-fingered grew herbs and salads in window boxes or backyards, though cultivation of vegetables was more for the suburbs, where soil was more plentiful and less sour, and habits less migratory.⁵⁰ Following older practices,⁵¹ and despite attempts at municipal regulation, domestic livestock was kept for eggs and meat. In the Bethnal Green neighbourhood where Mrs Layton lived as a child in the late 1860s ‘nearly everyone kept pigs or chickens or ducks—sometimes all three’;⁵² while a settlement worker in South London in the 1900s knew courts with ‘chickens, pigeons and rabbits’.⁵³ Even small back yards could

be made to accommodate a few cramped home-made hutches for rabbits, which bred easily, made good eating, and were cheap to feed.⁵⁴ (Children collected discarded cabbage leaves from the market or greenery from canal banks, overgrown sites, common ground and parks.) Boxes were nailed on back walls to house ‘a few laying hens and a cockerel for Christmas fattening’,⁵⁵ or for a Sabbath meal.⁵⁶ One backyard chicken house in Hoxton, whitewashed inside and green out, ‘was so nice’ that a child ‘envied the chickens’.⁵⁷ When a Battersea man and his wife added to their three children another five, whose mother had died and whose father was a waiter working late, they enclosed some bare ground by a railway arch, dug a small pond, and kept chicken and ducks, to increase their food supply.⁵⁸ Such measures would, of course, be easier in less crowded neighbourhoods (and might be more common amongst the slightly better-off and the less nomadic); but in 1884 the school board visitor for Clerkenwell and Holborn reported that in certain crowded courts fowls and rabbits were kept even in cupboards.⁵⁹

CONSUMPTION PATTERNS

In the poorer working-class family only the father would have any regular amount of meat or fish. Maud Pember Reeves commented that, with a budget for food of ten shillings at most, ‘only one kind of diet is possible, and that is the man’s diet. The children have what is left over.’⁶⁰ (Mothers had even less.)⁶¹

Bloaters was three ha’pence each. Sometimes Dad would have one for his tea for a treat because he worked until nine o’clock at night. We just had bread and jam or bread and dripping—you couldn’t have both—for our tea, same as we had for breakfast.⁶²

According to James Kerr, school medical officer in London in the 1900s, the children of the poor never had vegetables or enough fresh milk, and lived on tea, bread and sugar.⁶³ Except at Sunday dinner they often did not have their own servings of protein food, though they might get titbits from the plates of the father and any other adult wage-earners—the top of a boiled egg, the tail of a haddock, the chance to mop up gravy or bacon fat

with their bread.⁶⁴ The father's prerogative sometimes by extension gave boys first claim on any protein food. This was criticized by M. Loane, a district nurse whose experience was partly in London and partly in the country. She thought that girls' health suffered because often 'their father's wages were too low or too irregular to provide sufficient nourishment for the whole family, and the larger share of the food went to the boys...'⁶⁵ This probably depended on the family: in some it was not the boy but the youngest or weakest who was most often favoured, while in others again, each child was 'treated' in strict turn.⁶⁶

In 1895 the results of a survey on local board school children's eating were published in the *Toynbee Record*, journal of the East End settlement, Toynbee Hall. At one school, where the parents' incomes were reckoned to be between fifteen and thirty shillings a week but were often irregular, the boys were asked during a lesson in composition to write on 'what each of you did yesterday and what you had to eat'. The girls were asked on a Monday and a Thursday in their domestic economy class to prepare dietaries showing what they had eaten on the previous day (table 7.1). Differences between Monday and Thursday showed up clearly in the data collected. As the week's money ran low towards payday, bread consumption became even more important, and supper shrank. Whereas on Monday only four girls had nothing to eat after tea, thirteen tasted their last food of the day then on Thursday.⁶⁷ The investigators estimated that one-sixth were 'in need of more nourishing food than they get'. Compositions produced from a second school, even poorer, showed that 32 out of 255 children had not had meat, fish, or soup on the previous day, a Thursday. Nor can the other 223 be assumed to have had full helpings: these figures, as the report admitted, tell us nothing about quantities. It is likely that bread was the chief filler. The 'meat' could 'mean the tiniest of slices or a collection of scraps called "faggots". "Fish" may be a halfpenny worth of fried fish of dubious age, or a small bit of dried haddock or kipper.'⁶⁸

Whatever the children were eating, it was not necessarily taken at table with other family members, nor always prepared by the mother, even if cooked at home. Elder daughters sometimes took over much of the domestic work, including cooking, especially if the mother went out to work, or was in poor health. A son might also step in if there was no daughter. Knowledge of cooking was not exclusive to women, even though it was

Table 7.1: “Two fair average dietaries” for East End schoolchildren, 1895.

I	Age 10, Standard Four	
	Breakfast	Bread and butter and tea
	Dinner	Meat fried from Sunday, potatoes and greens, batter pudding
	Tea	Coffee and bread and butter
	Supper	Black pudding and bread
	Between Meals	Bread and butter, toffee.
II	Age 11, Standard Six	
	Breakfast	Eggs and bacon, bread and butter, tea
	Dinner	Soup, bread and cheese
	Tea	A cup of tea and half a teacake
	Supper	Small brown herrings, bread, butter, tea
	Between Meals	Half apple, piece of cocanut, toffee, nuts.

Source: “Investigation into Board School Children and their Food,” *Toynbee Record*, Feb. 1895, 63.

seen as their domain. Men and boys sometimes cooked their own food at work if they had access to a fire. Navvies ‘would gather round the brazier fire, cook a two-eyed steak, or a rasher of bacon and eat it laid on a huge slice of bread’.⁶⁹ Grilling was a common method, using an improvised fork; so was frying, perhaps on an enamel plate. Chops, bloaters and bacon and eggs were regularly grilled or fried over workplace fires. The master hatter who trained Frederick Willis sent the boy out every morning for a mutton chop, and then cooked it in a Dutch oven by the kiln furnace.⁷⁰ Charles Connor, apprenticed as a cooper in 1912, recalled another method from those days:⁷¹

A favourite breakfast was produced by wrapping a gutted bloater in white paper followed by a complete newspaper then thrown in amongst the red hot oak embers. When the flames and the little red dots had faded away it was raked off the fire. When peeled of its black wrapping, the white paper would remain containing all the oil and the flesh of the fish intact. A very tasty morsel.

A bachelor Scot in Bethnal Green in the 1890s had the regular habit on arrival at work of lighting the gas fire and placing on it ‘his tin can of “burgoo” or oatmeal gruel for breakfast’.⁷² Men, or boys who were earning, would sometimes on their way home buy something tasty to cook (or get

cooked) at home that evening or for breakfast. (Thomas Wright in 1867 described a couple of young apprentices who would lash out on sausages and bacon then quarrel next morning over ‘the right of precedence in cooking [them]’.)⁷³ At the other end of the social scale, in common lodging houses, it was also usual for individuals to cook their own supper over a common fire; and navvies and men who tramped after work would soon learn at least some basic frying and grilling techniques.’⁷⁴

CHILDREN

Autobiographical evidence refers to cooking by men and boys, usually for themselves, but sometimes for the family.⁷⁵ Charles M, born in Chapel Street (Islington) in 1870, lost his mother when he was three. His father, who ran a small barber shop, then brought him and his brother up, partly relying on food bought ready cooked, partly cooking himself. They ate saveloys, baked potatoes, bullock’s heart, fish and potatoes, breast of mutton, sheep’s head, home-bred rabbit, pease pudding, and bread with butter or cheese.⁷⁶ Walter Southgate and his friends ‘ingratiated ourselves with the night watchman in the evening who allowed us to bake potatoes on his brazier fire’.⁷⁷ William Nn, born in Poplar in 1896, also used with his pals to cook for fun, more ambitiously producing a surreptitious meal in the evenings on an old army stove in a garden shed.⁷⁸

In the cold evenings about half a dozen boys would arrange for each to bring along some coke or coal, a few sticks of wood, a few potatoes [filched from the market]...Salt, sugar and vinegar was also obtained by dubious means...We would soon get the fire going and then we would roast the potatoes on top of the stove. When they had cooked the salt was produced and we made short work of eating our efforts. Then we would proceed to make our ‘afters’. We had secured an old cooking pot in which the sugar and vinegar was placed. After getting this to the boil and after a lot of stirring, the liquid was poured on to a small sheet of steel and when it was set we lifted this off with an old knife—we called it ‘toffee’ and we thought it was wonderful.

The multiple duties of twelve-year-old George Acorn, as a shop boy in a shop-fitting factory about 1897, included cooking dinners for the men. Frying bacon came first, and ‘ordinary dinners such as fried mutton cutlets, with potatoes and cabbage, were soon easily within my reach’, but his first Irish stew was less successful.⁷⁹ Mr Shed’s descriptions of his mother’s cooking and his own recipes from ‘the old tradition’ suggest that his own efforts were spurred by pleasure in food.⁸⁰

All kinds of prepared food could be bought in small quantities from stalls and cookshops, where children buying for themselves were regular customers, whether they paid with a penny or halfpenny supplied by their mother or some other adult, or with coppers they had earned or cadged.⁸¹ Bread from home was helped down with pickles or some other relish, or they bought something more substantial, like brawn (‘made from coarse parts and trimmings of good sound meat of all kinds’).⁸²

Mrs Nassau Senior, writing in 1873, suggested that such children did not do badly for food: they might not get as much meat as was provided in the pauper schools, but they had a wider range, especially of fruit and vegetables, bought cheap by costermongers during a glut and hawked round every back street—‘apples and pears, radishes and lettuce, currants and blackberries; even penny slices of pineapple are occasionally within their reach’.⁸³ The pauper-school children had ‘unexpected things’ (instead of the endlessly predictable round of institutional food); ‘on hot dinner days they get it really hot, and they eat with relish and enjoyment and do not leave half their dinner, as is the habit of so many pauper children on soup days’; moreover ‘food eaten with pleasure nourishes far better than a superior diet eaten, for any reason, without enjoyment’.⁸⁴ (It should be noted, though, that the abundance of the fruits would have been limited to their brief seasons and that Sunday dinners may not have been piping hot by the time they were fetched home from the baker’s oven.)

Mrs Burgwin, headmistress of a very poor school in the Borough (inner South London), was less sanguine:⁸⁵

I have watched them...with bread in their hands and running off to the pickle shop to buy a pennyworth or halfpennyworth of pickles, and they used to eat the pickles with the bread, and if they were a

little better off next day they bought fried fish or something of the kind—a most miserable way of living.

A boy who was asked in 1884 what he would choose to eat if he could spend any amount was clearly familiar with a wider range of food than this. The gusto with which he considered the question recalls Mrs Nassau Senior's views rather than Mrs Burgwin's; but it is interesting that he stayed almost entirely within a budget of pence and halfpence:⁸⁶

Well... I'd start with a cup of eels, a halfpenny hot, but cold, a penny, cos then it's fixed stiff. Eel pies is two pence, they are very good, but I'd sooner have bullock's heart; they cost eighteenpence apiece; after that I think I'd have tripe, tripe boiled in milk, then sheep's head or cold boiled beef, you gets it at the shop, two ounces at tuppence halfpenny. Greens is a halfpenny, and pease pudding a halfpenny; plum pudding is a penny halfpenny a slice, but I like two doorsteps at a halfpenny a piece just as well.

John Bellamy, as a child in Hoxton in the 1890s, if he had the money, would have bought 'a cut off the joint and two veg. for 2d', or 'a halfpenny worth of eel liquor' from Manze's, and 'a ha'porth of chips'.⁸⁷

Fried fish and potatoes, from one of the shops which flourished in all poor neighbourhoods by the 1880s,⁸⁸ were eaten both at home and in the street. By 1911, according to Paterson, numberless shops abounded 'where skate and cod [were] fried in oil, and served out steaming over the counter, on scraps of old newspapers, with chip potatoes'.⁸⁹ They are especially popular with the young, though not always with the authorities. (Dr Eicholz denounced children's usual dinner as 'nothing but what a copper can purchase at the local fried fish shops, where the most inferior kinds of fish... are fried in unwholesome reeking cottonseed oil'.)⁹⁰ It was easily the most favoured choice when in 1905 children in an infant's school in a very poor neighbourhood were asked what they would buy, 'supposing your mother were too busy to give you any dinner at home, and she gave you a penny to go and buy your own'. Out of forty-six children in the top class, thirteen said fish and potatoes; five, fish; five, potatoes; five, soup; four, pudding; three, pease pudding; two, peas and potatoes; two meat and

potatoes; while there were single votes for Christmas pudding, apple pie, jam roll, jam tart, rice, cheese and apples.⁹¹

Besides frequent passing allusions to the consumption of fish and chips, we have more detailed information from the official report on an outbreak of enteric fever in 1899, which was traced to a consignment of fish. During the investigation, conducted by Dr Hamer, it was found that a disproportionate number of the victims were between ten and twenty, and that other members of their families were left unaffected. Hamer interviewed the victims and their families, and found that it was not uncommon for members of a family to have quite separate eating habits. He noticed three groups of frequent customers: older family members working away from home who often catered for themselves; children sent out with a penny or halfpenny to get something to eat ('more especially on washing day or under other circumstances in which cooking at home was attended with difficulty'); and those who were 'especially fond of eating fried fish and usually devoted any pennies or half-pennies to purchasing it'. Some children were described by their mothers as having 'a craving for fish', or being 'terrible fond of fish', or 'a dreadful child for fish and taters'.⁹² In order to establish general consumption patterns, he set a watch on particular shops and had customers recorded by their sex and estimated age. The results showed that consumers between the ages of five and twenty predominated; and that these customers were most likely to be buying for their own immediate consumption. This was even more true for boys and young men than for girls, especially those under ten. In the (estimated) five to ten age group, ten times as many boys started to eat their purchase at once (fifty-one, while five took it home), whereas nearly a third of the girls in that age group took it home (fourteen, as against thirty-nine eating it at once).⁹³ This difference reflects both the greater spending power of boys, and the girls' closer connection to the home.

MALNOURISHMENT AND HUNGER

Poor children were often hungry. In the 1860s individual efforts were channelled into the Destitute Children's Dinner Society, which provided free dinners first at ragged schools and missions, then at National and British schools, then also at some of the new Board Schools of the 1870s. By 1888 they had sixty-four dining-rooms and served 17,000 to 18,000 dinners a

week to children recommended by a teacher, minister or mission worker.⁹⁴ But teachers still saw hungry children. Mrs Burgwin, first headmistress of a school which opened in 1874, soon organized regular free ‘dinners’ of bread with cocoa or soup, and paid for them with money raised from her friends and acquaintances.⁹⁵ In 1880, with support from George Sims, the Children’s Breakfast and Free Dinner Fund was founded, and fresh contributions were raised through his paper, the *Referee*.⁹⁶ Starving children, Sims wrote, could not be expected ‘to learn as readily as well-fed, healthy children, [nor] to attain the same standard of proficiency in a given time’.⁹⁷ Other voluntary efforts provided more and more free breakfasts and dinners, but they were never enough.⁹⁸

In the 1880s a campaign against ‘overpressure’ criticized the strain imposed on underfed and delicate children by educational demands. (It was fuelled in part by conservative opposition to the ‘ambitious’ aims of the School Board, and to their cost.) This led the Education Department to commission a report from Dr Crichton Browne.⁹⁹ He confirmed the existence of ‘half-starved’ children in the London schools, and, like Sims, argued that they must be fed for education to be effective.¹⁰⁰

Food anxieties are to the child what pecuniary anxieties are to grown men, and may greatly interfere with their working power, and add to the physical effects of insufficient nourishment. These anxieties cannot be dissipated by a good wholesome meal now and then. To be at its ease, and in trim to use its brain to good purpose, a child must know, as better-class children do, that its meals will come round with unfailing certainty.

Provision of meals by the school authorities was held, however, to be outside their legal province, and there was in any case considerable opposition to the idea. The food and health of young children, insisted Her Majesty’s Inspector, Rev. J. G. Fitch, in a dissenting report printed alongside Crichton Browne’s, should be the parents’ charge, and it was harmful to risk undermining their sense of parental responsibility.¹⁰¹ A motion that the London School Board should ask Parliament to enable them to provide a meal a day for the children of parents unable to pay their school fees, put forward by George Mitchell and Edward Aveling in 1884, was defeated by thirty votes to six.¹⁰² (A similar proposal by Headlam in committee in 1891 was not

even seconded, perhaps because of unfavourable legal advice.)¹⁰³ Voluntary provision improved, but in 1889 a School Board return showed that of the 43,843 children estimated to be coming to school in want of food (12.8 per cent of those on the rolls), charitable effort was not managing to feed even half.¹⁰⁴ After 1895, a new committee started to collect data on underfed children. A deputation from the socialist Social Democratic Federation,¹⁰⁵ introduced to the Board by two prominent teachers, Thomas Gautrey and T. J. Macnamara, pressed for 'feeding from the rates', a proposal supported by the more radical Board members like ex-teacher, Mary Bridges Adams. But the Hungry Committee's 1899 recommendation for full co-operation with the voluntary groups and a contribution of six thousand pounds was not passed, even though it reported 55,050 underfed children in London.¹⁰⁶ Only in 1906, in the new mood of anxiety about national efficiency and with a Liberal government, were the education authorities at last empowered to supply meals for the needy children in their schools. And even then actual provision was limited by prejudice and cost.¹⁰⁷

Evidence about children's nutrition and health was collected in these decades partly out of humanitarian concern and partly because of the current idea that child health was of significant national and imperial interest.¹⁰⁸ Attempts to assess the extent of undernourishment produced figures with varying pretensions to accuracy: Mary Tabor, one of Booth's assistants, thought the 1889 returns had been 'loosely made during a period of exceptional distress', and had led to claims 'doubtless in excess of the facts', but she admitted the number of underfed children was 'deplorably large'.¹⁰⁹ Without attempting a verdict on the total numbers, since the criteria and methods used in constructing each estimate varied, one may surely agree with that judgement, whether the number of hungry children was 43,843 (the Board's 1889 estimate: 12.4 per cent of elementary schoolchildren), 55,050 (its 1899 figure: 10 per cent of average attendance), or 122,000 (16 per cent of elementary schoolchildren, in Dr Eicholz's evidence to the Physical Deterioration Committee in 1904).¹¹⁰

The investigations into child health may not provide reliable statistics, but they do furnish evidence which expands and confirms our knowledge of working-class habits. They can also alert us to the significance of cultural difference between the observers and those on whom they reported. 'Unsuitability' and 'irregularity' are the words which recur, both of them carrying a subjective bias based on middle and upper-class conventions

about food.¹¹¹ As with child-rearing, reasons for working-class practices were seldom considered, even when they were obvious—for instance that chairs, space or plates and forks were insufficient for the numbers, or that everyone came home at different times.¹¹²

In middle-class convention, eating together demonstrated and consolidated the joint identity of the family, so eating separately suggested its disintegration. But many a working-class mother found that on weekdays domestic peace was better preserved by feeding the children first, so that her husband could have her full attention on his return from work, and not be cramped and irritated by a gaggle of children. This did not mean they had no family identity. Indeed the weekly family meal was often something to be looked forward to, part of Sunday's relaxation or Friday evening's Sabbath celebration, marked by candles or a tablecloth.¹¹³ Alice L.'s father (fetched from the pub for Sunday dinner) protected the white cloth by putting pieces of newspaper under the children's plates.¹¹⁴ Questions of status were also involved, but they were not everything.¹¹⁵

All these families feel poverty most if it deprives them of their Sunday dinner; they do not mind living on tea and bread all the week if they can have a good Sunday meal. One reason for this may be that the husbands are at home, and the good ones will look after the children and at times even cook the vegetables. Also they all have time to enjoy the meal, the memory of which lasts until the next Sunday.

By the 1900s, at least, the campaign to feed hungry children was more than that for some of those active in it. It was about inculcating a new set of domestic practices, in which a mother who did not go out to work was to prepare meals which were to be eaten at regular times by the assembled family, at table, properly, every day. This underlies the criticisms of food as unsuitable, or 'tasty perhaps, but insalubrious', and of the irregularity of meals which 'seem to come as "fancy" dictates', and of the children going off with their pennies to eat whatever they chose to buy.¹¹⁶ Participants in a conference on diet, cookery and hygiene in schools, in 1913, were told:¹¹⁷

A meal at which all the family sit down to a properly appointed table, with a clean cloth and crockery, is almost unknown in some of the

homes from which the children come. Food generally lies about all day, and there is no settled 'mealtime'. When a child feels hungry or is specially troublesome and has to be kept good, he is given a piece of bread, on which some lard or butter is hastily dabbed, and he eats this walking about the room or in the streets. Even if the 'grown-ups' are found sitting at the table, the children will nearly always come and help themselves and then eat their portions walking about the room.

An underlying assumption in such a discussion was that the problem of underfeeding was more than economic. Ignorance was commonly alleged as an explanation, as in didactic texts on cookery and mothercraft such as the wartime Handbook for Housewives published by the National Food Economy League. According to its authors: 'all attempts to give an infant a little bit of what the family are having are not only foolish but dangerous, and many delicate children are killed by this mistaken kindness', 'three good meals a day are enough for schoolchildren, and no child should ever be given anything at odd times'; and 'no child should go to school on a breakfast of tea and white bread'. Milk was stressed as essential, but as Maud Pember Reeves pointed out, since a pint cost tuppence, one a day would cost 2d a week: impossible even for one child within a total food budget of eight to ten shillings a week.¹¹⁸ Most of the basic components of the working-class diet were regarded as unsuitable for children. Children up to the age of seven, and preferably beyond, 'should on no account be given...pork, sausages, pickles and pickled food, fried meat, fried fish or fried eggs, shellfish, pastry, ices, tea, coffee, beer, spirits, "minerals" (ginger beer, lemonade etc), unripe or overripe fruit.' Finally, 'Loss of appetite and "wasting" in children between two and seven years is often caused by overfeeding or wrong feeding, and the cure must be brought about by regulating and simplifying the diet and not by trying to feed the child up'.¹¹⁹

The advice-givers thought that underfed children must come from the families whose domestic practices were all wrong. If children were hungry, parents were probably neglectful and perhaps drunken; if they were undernourished it was not shortage of food that was responsible, but the fact that it was the wrong food, eaten at the wrong time and in the wrong place.¹²⁰

‘Underfed’ children are not always foodless; they have often enough food of a sort, but ‘the sort’ is bad: ‘fried fish and taters’, ‘a ha’porth of ‘faggots’, a slice of German sausage and pickles; anything and everything but wholesome food.

These assumptions impeded accurate observation. In the *Toynbee Record* enquiry in 1895 the investigator was caught on the hop because he expected the worst-fed children to be those whose appearance betrayed ‘poor’ domestic practices: of the four worst-nourished girls three were ‘so clean and tidily dressed that it had not occurred to their teachers or myself that they could be in want.’¹²¹ A medical officer investigating rickets some years later was similarly surprised. He was incredulous of a headmaster’s estimate, at a school with children ‘of a respectable class...well fed and clothed’, that over 100 were delicate or defective. Then he found it justified: they were ‘altogether a flabby and pappy lot’, because they were ‘too respectable to play in the street’.¹²²

Respectability did not guarantee better nutrition or health. Dr Francis Warner, after extensive and methodical (if superficial) examinations of London elementary schoolchildren following an initiative by the British Medical Association in 1888, reported in 1895 that more children in the ‘superior’ Board schools were judged ‘of low nutrition’.¹²³ Concern for respectability made some poor mothers reluctant to accept charitable help such as free dinners. (One mother who ‘wouldn’t take nothing from nobody’ reared six children whom ‘she always tried to keep...as nice as she could’, despite their tubercular father’s long illness and death. Even when they only had bread and jam to eat at home, free dinners were ‘degrading’ and not to be considered.)¹²⁴ Family rules limited the children’s opportunities to earn, to forage or fend for themselves. They even spent coppers on keeping up appearances while economizing on food.

The conflict of priorities is evoked by an exchange between two Hoxton women, recounted by Mrs Muckell (born 1907). One asked the other why she sent her children to school dirty when soap only cost a penny, and the other robustly retorted that full bellies were more important than clean faces, and a pennyworth of potherbs (carrots and onions for soup) was better value.¹²⁵

In families where hunger was familiar there were jokes about it, like the sardonic replies to the insistent, ‘What’s for dinner, Mum?’: ‘Leg of nothing

and no turnips', or 'pickled herring feet and canary elbows', or 'a rasher of wind and a fried snowball'.¹²⁶ But children learnt to live with hunger, and found ways to stave it off if at all possible. Rougher families encouraged self-reliance: their children knew where to earn the odd copper, or how to cadge it, and how to lay it out to best advantage.

Wherever free food was to be had there were children in crowds, waiting on their own account, or for something to feed to their little charges, or to take home. Whitechapel children lined up behind the London Hospital for surplus dripping from the hospital kitchens: tuppence-worth filled a jug.¹²⁷ At Sweeting's, 'the great fish salesman's in Cheapside', there was a crowd of boys and girls 'any evening at half past eight, waiting for fish cuttings to be given away', wrote a journalist in 1886.¹²⁸ Nearly twenty years later 'a daily distribution of...stale food, customers' leavings and other waste' was made every morning by Sweeting's, as by other firms. The first children were waiting outside at 5.30 A.M., and by seven o'clock, when the door opened, there might be fifty or sixty. They were each then given a 'parcel of bread and pieces' by a shopman with a basket, 'whereupon the children instantly separate and scamper away. And how often does their haste suggest that the family breakfast is impossible till they reach home.'¹²⁹

Less prestigious establishments also gave away left-over food; or discarded scraps worth investigating. Two 1904 photographs, 'Waiting for the scrap pail' and 'Race for the scraps', show first a mother and three children peering round a corner, then the three boys grabbing a bucket which a girl has just put outside the shop door.¹³⁰

Children were the major clients of the soup kitchens set up every winter by various missions and charities. When the Costers' Mission in Finsbury served free Irish stew once a week in the early 1870s, 300 or so children came for it, some singly, some 'brought by their sisters and brothers', and 'of all ages, from the sturdy street boy of ten to the tiny six-months-old baby in arms'.¹³¹ In Haggerston, the sisters at the priory dispensed soup to children who queued with pitchers; and their all-purpose tonics to those who brought medicine bottles.¹³² Walter Southgate used to go to the Russia Lane Mission and join 'a long queue of adults and children carrying a varied assortment of utensils for carrying home this wholesome food...scrags of meat, lentils, pea flour, carrots, celery and stock from butchers bones'.¹³³ Hymie Fagan learnt from other boys at the Spitalfields Soup Kitchen for the Jewish Poor not to push to the front of the queue, as he had done at first,

but to hold back, so as to get the richer mixture towards the bottom of the boiler.¹³⁴ Schools in poor neighbourhoods also provided free or cheap dinners, especially in the winter: Charles Morley, in 1897, noticed some ‘little mothers’, ineligible because their schooldays were past, who ‘persuaded the janitor to let them eat up the scraps’ at the last sitting of such a meal, and sat feeding ‘their’ babies the gravy.¹³⁵

Individuals also distributed free food. For many years Mrs Kelly, stall-keeper outside the Britannia Theatre, Hoxton, filled children’s jugs with free broth from her big pan of sheep’s heads, as well as sending her daughter to deliver left-over food at the homes where she knew it was most needed.¹³⁶ In Walthamstow in the 1900s the landlady of the Chequers Inn organized contributions from local traders and made a boiler full of soup (‘like a big copper’) which she ladled into the children’s jugs.¹³⁷ Another kind of hand-out was collected by children one Edwardian Christmas, when ‘hundreds’ of Christmas dinners were given away by the flamboyant Horatio Bottomley, Hackney’s popular Member of Parliament.¹³⁸

Alert wandering children obtained food in many ways, to eat at once or to bring back. A small child who once discovered that the local police station comforted lost children with bread and jam or other treats, could get lost again once or twice, though not more.¹³⁹ Slightly older children tried friendly shopkeepers for handouts; or they cadged from those about to eat (‘Got a ‘apenny governor, got a ‘apenny for a bit of fish?’ Outside all the eating shops you used to do that sort of thing.)¹⁴⁰ At Elephant and Castle tube station a group of ragged children waited every evening by the lift gates for homegoing City workers to emerge from the Underground.¹⁴¹

Most people took a snack to eat in the office or workshop during mid-morning, and the keen wits of these children had discovered that sometimes the snack was not eaten but brought home again. As the crowds came out of the lift the children accosted each individual with the earnest enquiry, ‘Got any lunch, guvnor?’ By this means they frequently got a packet of food. I recall a man handing a packet to an eager child who rapidly opened it and exclaimed rapturously, ‘Blimey! CHEESE!’ as if cheese were the greatest and most coveted of delicacies.

In really poor neighbourhoods, then, children knew that ‘you could always keep living, there was plenty of food and... somewhere you could get something’.¹⁴² Home was not their only source of food. In most children’s daily experience a large part was played by life outside the home, by the street and the neighbourhood, their people, places, events and opportunities, and this was as true for food as for everything else. At the same time, the importance of food in their lives at the simple level of getting enough, and their mothers’ struggles and self-sacrifices in the effort to make basic provision, contributed to the deep feelings of loyalty to the mother which are often reflected in memories of childhood. In families where the daily struggle was less acute, and where appearances were given more priority, meals were more regular, more family-based, and more likely to involve strict regulation of behaviour. Attention to food preparation and consumption (especially table manners) was also part of the crusade of the ‘respectable’ against the ‘rough’, which by the end of the nineteenth century was increasingly engaging sections of the working class as well as social reformers of superior station. The exploration of issues around food thus throws light on the relationship of children to their parents, their siblings, their homes, and their neighbours, as well as on specific experiences of childhood and on contests within and between class cultures.

NOTES AND ABBREVIATIONS

This article complements the author’s recent book, *Growing Up Poor: Home, School and Street in London, 1870–1914*, London 1996.

Place of publication throughout is London if not stated. Manuscripts without attributed location are in author’s possession. The following abbreviations are used for recurring titles:

Bibby, *Pudding Lady*: Miss Bibby, Miss Colles, Miss Petty and Dr Sykes, *The Pudding Lady: A New Departure in Social Work*, 1912.

Booth, *Poverty*: Charles Booth (ed.), *Life and Labour of the People in London*, Seventeen vols 1889–1903 (Vol. 1, 1889; vol. 2, 1891; 10 vol. edn 1892–7; 17 vol. edn 1903), First Series (three volumes), ‘Poverty’.

Burnett, *Plenty and Want*: John Burnett, *Plenty and Want: a Social History of Diet in England from 1815 to the present Day*, (1966) 1979.

Laski, ‘Domestic Life’: Marghanita Laski, ‘Domestic Life’, in Simon Nowell-Smith (ed.), *Edwardian England*, 1974.

Paterson, *Bridges*: Alexander Paterson, *Across the Bridges, or, Life by the South London Riverside*, 1911.

Reeves, *Pound a Week*: Magdalen Pember Reeves, *Round About a Pound a Week*, (1913) Virago, 1979.

Samuel, *Underworld*: Raphael Samuel, *East End Underworld: Chapters in the Life of Arthur Harding*, 1981.

Southgate, *That's the Way*: Walter Southgate, *That's the Way it Was*, 1982.

White, *Buildings*: Jerry White, *Rothschild Buildings: Life in an East End Tenement Block, 1887–1920*, 1980.

LSVA: London Sound and Video Archive set up by London History Workshop Centre, now held at Museum of London.

PP: Parliamentary Papers

PRO: Public Record Office

SBL: School Board for London

Essex: Essex Oral History Archive, consulted by permission of Paul Thompson.

CHAPTER EIGHT

Body and Soul: From Tension to Bifurcation

ULRIKE THOMS

The dichotomy of body and soul permeates much of the history of philosophy. There is no one way to approach and account for this tension. The history of food generally eschews the very notion, and the relation between food, body, and soul is rather seldom discussed head-on. This may result from the fact that, in contrast to the body, the soul cannot be grasped directly (an intermediary, whether theory or embodiment, is necessary to capture the entity designated as soul). It is the seat of emotions, feelings, fears, joy, and—last but not least—personality. And yet, eating and drinking, very material activities, are also affective, if not necessarily sensuous activities: they generate sensations and are, in turn, affected by moods. They take place in an ambience: it may not necessarily be spiritual but it carries meaning. And meaning offers a take on the soul's myriad facets. Hence, I initially take a linguistic look into the communicative, social contexts to which the association of body and soul refer. Subsequently, I will highlight how the rise of scientific medicine has altered the relationship of body and soul in the nineteenth century, most notably by defining eating disorders. Other targets of investigation are vegetarianism, fasting, and dieting. This account does not cover all fields of interest and all problems, by

far. The question of taste had to be left out. The intention is to work out the problems that came about with the development of the modern nutritional sciences, a nineteenth-century development that helped to distend, and then deepen, the divide between body and soul. As research on obesity shows, this split is a major obstacle to understanding and finding solutions to the current medical affliction. Not only the obese body, but even the soul have lost their contours and are under stress.

A contemporary entry to the linguistic space denoted by body and soul offers good evidence of their cultural determination. The *Deutscher Wortschatz* (German vocabulary corpus), a dictionary based on a daily evaluation and extraction of words from newspapers, offers a clue to their associations.¹ Not surprisingly, *soul* comes up with respect to music, but hardly ever with regard to emotion or spirit. Links to *mind* and *body* exist, but are to be found at a greater distance to the word *soul* than the relations between their German equivalents. In German, indeed, *Seele*/soul is most closely related to *Geist*/spirit. Emotions, captured by heart/*Herz*, as well the physical entity *Körper/Leib* (body/belly) are positioned at a further distance. At the same time, *Körper und Seele*/body and soul is a standing term, used as often as *Körper*/body alone (no such association appears with the English soul). The combination of body and soul emerges as a trope in the German language. I dare say that the expression reflects the role of the holistic stance in German medicine and philosophy fairly well. These views have their history.

HERITAGE: HUMORAL PATHOLOGY

Throughout the nineteenth and the early twentieth centuries, German scientists presented themselves as ascetics; just as studious, austere monks in previous centuries, they did not adhere to bodily pleasures and material comforts, but concentrated fully on their intellectual life.² This self-portrayal fit well into the scheme of humoral pathology, in which there is a strong link between the food one eats, and the body and the temperament one has. Based on writings of the Greek physician Hippocrates (c. 460–377 BC), it exerted an enormous influence on medicine in ancient Greece and Rome. Its main assumption is that the human body contains four fluids or humors: blood, phlegm, black, and yellow bile, each of which has its own

characteristics. Blood is hot and wet, phlegm is cold and wet, black bile is cold and dry, and yellow bile is hot and dry. The inner organs referred to one of these humors, so that the individual body expressed the relations between the influence of the different humors and the individual organs.³ Perfect health, it was believed, resulted from absolute harmony between the four humors, whereas imbalances might result in some form of disturbance or, even worse, in illness. In this system, food was said to have specific attributes. Ingestion introduced these principles into the body, thus influencing the relations of the humors within the body and their interactions with the organs. This may suffice to explain the basic idea of this multifactor model of health and illness. Though introduced in Antiquity, this model exerted its influence up until the nineteenth century in scholarly dietetics (and beyond in quotidian life).

Humoral thinking and acting are of special interest for the history of the body because, as a theory and explanation of how humans evolved and interacted with their physical environment, it stood for a perfect union of food, body, and soul. The ideas about the relations between temperaments, foods, and the body were not merely theoretical—they offered guidelines for personal health behavior. At the same time, they helped in *reading* a body in regard to its psychological traits, inner qualities, and style of living. The phlegmatic person, who was dominated by cold and moist elements, was said to have fewer emotions, and to be slow and restrained, whereas the choleric, who was mainly under the influence of the dry and warm bile, was almost the opposite, as he was imagined as a hot-tempered, easily exploding individual. In contrast, the melancholic person with a dominance of cold and dry, black bile was seen as determined by strong feelings of gloom, sadness, mistrust, and critique, whereas the sanguine was under the influence of the fluid blood and the element air. Therefore, he was regarded as being somewhat light-footed and vivid, but with weak feelings.

Hippocrates' holistic medical theory, which was mainly popularized in the Middle Ages, served as a basis for nutritional guidance far into the nineteenth century, as it combined several advantages. It was fairly systematic, based on relations, not on fixed values. It allowed for the integration of the aspects of the particular situation of a person and his specific, individual characteristics. Moreover, it proved very elastic, so that it was able to accommodate some elements of the new, scientific knowledge on nutrition



FIGURE 8.1: The four temperaments. Engraving by W. Johnson and A.K. Johnson, early nineteenth century, Iconographic Collections of the Wellcome Library, Library reference no.: ICV No 9707.

that emerged in the nineteenth century. Even Jacob Moleschott's extensive and pioneering *Physiology of Food* (1859) referred to the temperaments and explained the need for foods in regard to the four main characters. As he suggested, sanguines and choleric persons would feel thirsty much more often than phlegmatic and melancholic persons because of their quicker metabolism. Sanguines should stick to a mild and cooling diet of young meat, light broths, fruit, vegetables, milk, and water in order to satisfy their frequently appearing appetite and hunger without putting too much stress on the digestive system. In contrast, melancholics, with their slow metabolism, were advised to eat a nutritious diet from light foods, to spice it fairly well, and to consume stimulating drinks such as beer, wine, and coffee.⁴ For modern people it seems as if humoral pathology belongs to history, as

it does. However, it has left some traits in society's imagery, food customs, and language, as we still use the above-mentioned terms for the different temperaments, and these are still connected with broadly acknowledged and shared images of character traits today.

CHALLENGE: THE RISE OF NUTRITIONAL SCIENCE AND THE DIVORCE OF BODY AND SOUL

Medicine has played a strong role in the setting of norms and measures. Nutritional physiology, as a science that was largely based on experiments, calculated and counted bodily processes. It was material in that it elevated the controlled experiment and laboratory observation to methodological imperatives. The influence of rational thinking and the emergence of a quantitative science of nutrition helped nutritional physiologists to develop dietary schemes that optimized food consumption with an eye on labor productivity and health.⁵

Even before exact measures for being *overweight* were known, obesity was rated as immoral because of the violation of the religious imperative of temperance. Of course, physicians knew about negative consequences of obesity on the grounds of empirical knowledge and experience. Brillat-Savarin's meditation on obesity in *The Physiology of Taste* not only notes that being overweight has a negative impact on strength and beauty, but qualifies it as a major obstacle to good health.⁶ If personal guilt resulting from gluttony and lack of moderation had hitherto led the single person to fear judgment day in his or her personal confrontation with God, the nineteenth century utterly modified the rules of the game. Society expected people to be rational and controlled, and to possess the detailed knowledge and the strength of will to eat according to the guidelines of rational nutrition.

From the late eighteenth century onward overweight people—who could be identified easily by their outer appearance—were always under the suspicion of doing harm not only to their individual bodies, but even to the social body (*Volkskörper*), by impairing their ability to reproduce and to have healthy and sane children, and by shortening their lives. Rationalization in food science, nutritional physiology, and normalization met to discriminate eating pleasure as dangerous, and the obese person as

someone who was unwilling or unable to calibrate his needs and desires by controlling his food intake.⁷ In a way, this is a tragedy, because it shows that innovative, modern nutrition science did not fulfill the expectations toward the emancipatory power of nutritional science. In fact, materialism, with all its positive knowledge on nutrients and metabolic processes, had turned against the eaters, as it abstracted from their social and emotional needs.

CONTROL OF THE SOUL VIA CONTROL OF THE BODY

If linguistic analysis discloses only one fact, it is that body and soul form something of a complicated binomial liaison. Quite obviously, they are grouped together, but their relationship is fraught with fierce tension. One might even affirm that competition characterizes their existence as a couple. It is now commonplace to conclude that one of the soul's components—the mind—won the race after the Enlightenment had put thought and reasoning above bodily concerns; or, rather, it instituted the axiom of man as a rational being. From a rationalist perspective man is able and expected to control his body and belly, and its desires. During its course, it also elevated a certain degree of leanness to a beauty norm. Embonpoint no longer represented health and wealth, at least not among the upper echelons of society. Norbert Elias, in his classical study on the history of table manners, has described this unfolding as the process of civilization, and by 1825, Brillat-Savarin illustrated the point nicely when insisting that a degree of agility and athleticism—that is, physical discipline and training—was required to engage in fashionable leisure activities, such as dancing, walking, and horse-riding.⁸ Controlling emotions and desires was a precondition for the development of modern society. From this perspective, control appears as the one way to free oneself from the linkage to low, physical impulses.

Extreme forms of asceticism maneuver to free the spirit from earthly weight. To discard and repress material and bodily preoccupations enables the fasting man or woman to unfold their full spiritual potential. When it comes to intellectual activity, this connection found a proverbial expression in the saying *plenus venter non studet libenter* (a full belly does not like to study).⁹ Ascetic fasting has a long tradition in many religions and believers still practice it today. In Christian religions it is conceptualized as *imitatio Christi*, as experiencing and sensually imitating Christ's suffering and

doing penitence on his way to the cross. This was the moment when God's son came closest to man, when his human corporeality became visible and perceptible.¹⁰

Liberating the soul by controlling the body are literary tropes that permeate the Bible and sermons up until the twentieth century: words, it is stated, can be food for the soul. Fasting emerges as a major cultural technique to purify body and soul. It was used in most religions to free the soul from bodily heaviness in order to be able to think and pray more intensely, and to increase one's receptiveness to religious feelings and sensations. It was a widely accepted religious practice that structured the yearly and weekly rhythm of life with fasting days and fasting periods. The corollary consisted of periods of gluttony. In this context, the religious word was said to nourish the soul, and religion in general was long conceived of as spiritual food. Being able to live by spiritual food alone, being able to disregard the bodily needs without any visible signs of hunger and without dying was thus connected with holiness. That is why fasting was sometimes staged as a spectacle and why people obviously wanted to believe in stories about people who fasted for long periods, sometimes for years, without showing any sign of sickness. Such meaning has pretty much disappeared, with the late nineteenth century acting as the watershed. Quantitative ratings of religious fasting in relation to body and soul in a literary corpus grew through the 1880s. Then they declined. In general, religion lost ground: secularization and the rise of scientific reasoning disputed its terrain. However, for some the link between fasting and religion still exists: research has shown that religious people in general have a higher body satisfaction and engage in less dieting for the sake of slenderness than non-religious people.¹¹

The rise of scientific medicine in the nineteenth century all but removed fasting from the therapeutic arsenal as it fought for academic supremacy against the long-established humoral approaches to health. Both the method and the philosophy appeared as retromaniac and unenlightened, in spite of their traditional presence in medical schools and daily life. While experiments on animals aimed at uncovering the appropriate supply of foods to preserve existence, abstinence from food to restore the human body did not figure among the curative methods in scientific medicine. It certainly elaborated medical dietaries adapted to different pathologies, but hunger lay beyond its instruments to cure ailments (except, maybe, epilepsy; starvation

had been one approach to reduce the number of seizures or have them disappear altogether. The caveat: there is a limit on how long you can keep a patient starving).¹²

Still, secular forms of fasting emerged precisely at the time when scholarly medicine condemned it as a treatment. In a very broad sense, fasting is used as an alternative term for *dieting*. A very special form of fasting, the so-called *Heilfasten*, was constitutive of life reform and alternative medical concepts in Germany. These alternative movements solicited, and indeed derived, a great deal of their conceptual tools from Hippocratic medicine. Fasting had prophylactic virtues. Its aim was to rid the body of poisons. The *Heilfasten* practitioners adhered to a fixed ritual of cutting down the intake of food and taking a laxative to purge the body and to clean the inside. Their aim was to improve health and vitality, which many of the protagonists saw threatened by modern urban living and the industrialization of food production. Some among them promoted the consumption of barely transformed foods, the most extreme advocating a reliance only on raw, natural comestibles. Individual targets provided the impetus of such efforts. However, social effects were on the reformers' minds: whether ideological, ecological, medical, or even aesthetic motivations propelled their efforts in fasting, their goals were comprehensive, in that they sought a general reform of life and modes of living.¹³ *Heilfasten* still exists today as a salutary method whose goal is often to reduce weight, although some assert that it sharpens sensory capabilities; that is, it increases the ability to taste and smell, in addition to clearing up the mind and hence improving the capacity for reflection.¹⁴

Other forms of fasting that are widely known in the public domain are anorexia nervosa and bulimia. Both are grouped under the term *eating disorder*; their use increased precisely at the moment when the phrase *body and soul* went into decline. In effect, the medical classification of anorexia falls into the second half of the nineteenth century. Research into its etiology emphasized its incidence in wealthier classes and, of course, among adolescent girls (despite recent work that has uncovered cases elsewhere, this is still the most popular understanding of the disorder). *Disorder* points to the fact that both illnesses arise in a specific social order that helps to explain their emergence as pathologies. And yet, notwithstanding today's popular opinion that anorexia is caused by an obsession with

weight, coupled with a distorted self-image and with the persistence of hunger pain, its first independent descriptions by William Gull in 1868 and Charles Lasègue in 1873 emphasized it as a psychiatric or neurological disease that induced the reduction of appetite, disgust of food, and pain while eating. Physicians looked for bodily correlations, for lesions in organs, but increasingly explained it as a symptom of female nervousness, which was nourished by extensive reading. The resulting therapy comprised isolation from the world, strict control of emotions resulting from visits from parents and relatives, and regular meals and eating. This is different from today's concept, which acknowledges the continuing feelings of hunger, but emphasizes the absolute will to control one's own body. This latter element may go hand in hand with a body image disorder; that is, with a distorted image of one's own body.¹⁵

MEAT-EATING WARRIORS VERSUS PEACE-LOVING VEGETARIANS: OR, THE PRODUCTION OF DIFFERENT BODIES AND SOULS VIA FOOD

The idea that food and soul are a holistic unity was, and still is shared by the followers of the life-reform movement in Europe and North America. Life reformers believed that they would be able to *produce* healthy bodies by following a certain lifestyle and food regime, which avoided, or at least reduced alcohol, but included natural foods, lots of fruit and vegetables, and wholemeal bread.¹⁶ Though somehow obscure from a modern point of view, the life reform was not only an idea. On the basis of an encompassing view of man, of his economic existence, and his intellect, holistic models for a healthy life in harmony with nature were developed. However, to follow the idea as such was regarded as insufficient. Theory was translated into practical sites conducive to wholesome and harmonious living. One of the most famous examples was the colony of Eden in Oranienburg near Berlin. Founded in 1893 and still in existence today, it realized the ideas of health reform and vegetarianism as peaceful living in good companionship with others in an association that bought land. Beyond running a farm that produced vegetables and fruit for its own consumption, the association founded a company that very successfully took up the production of reform foods such as margarine, juices, and jam for sale.¹⁷ Friedrich

Landmann (1864–1931), one of its early members, in 1918 determined the aims of life reform as follows:

Life reform as a mental movement of recent times is founded in the perception and the conviction that the recent cultural development is not in accordance with human welfare, health and morality, and endangers the further existence of a well-ordered human society. Life reform as action therefore takes up the task of directing our development in new, healthy pathways and thus aims to influence the human as such and living conditions as well because humans and their environment are mutually dependent.¹⁸

There were several movements with differing aims, but the idea of vegetarianism was followed by most of them.¹⁹ The question of eating or not eating meat is well suited not only to exemplify and discuss questions of identity, but even the relations between the body, traditional hands-on knowledge, as well as newer scientific knowledge, tradition, social values and beliefs, and daily food practices. Therefore, it has often been used to analyze the food system as a whole and especially the development of capitalistic food production, as introduced in the meat-packing districts of big cities.²⁰

In fact, meat has always had a strong symbolic meaning—for example, in the collective hunting of tribes or in the subsequent ceremonies, during which the participants symbolically incorporated the power of the hunted animal by drinking its blood or eating its heart. Another example was seen in religious cults, where, during ceremonies, animals were slaughtered and sacrificed. As a scarce and expensive commodity meat was consumed by the powerful and wealthy—that is by men—whereas the poor and women had to get along without meat. During the nineteenth century it became a cornerstone of physiological research and reasoning about human diet. Francois Magendie's (1783–1855) experiments with dogs proved meat's essential role as protein in nutrition around 1800 and in the 1830s Justus von Liebig had justified this idea by stating that meat was the source of muscular strength. The so-called Voit standard was established in 1881 and it recommended a daily intake of 120 g of animal protein. Very soon this measure became the linchpin of discussions on diets in poorhouses,

prisons, and the military, where the integration of such an amount of meat was a means of securing minimal, acceptable food standards. It became a crucial element in the promotion of national, military, and industrial fitness and the master food to maintain the health and strength of workers. Rising meat consumption was rated as the precondition for improving the health status of the people and their social morale. It was a common belief that meat was an element of virility, so that vegetarian journals had to deal with questions relating to the connection between a meatless diet and sexual impotence. This points to the deep-rooted links between sexuality and meat (and food in general), which partly rely on the gendered attribution of aggressiveness to men. These were, too, touched on by the meat question, as meat was conceived of as a male food, not always suited for women because of its special qualities. To take another example: the Italian diet was described as being very simple and nutritionally insufficient, especially in regard to their low meat consumption. As the amount of protein was regarded as the main indicator for the quality of a diet, scientists thought rather negatively about the Italian diet, especially as pellagra—though caused by a niacin deficiency—aggravated the diagnosis. Therefore, the food was often described as being *soft* and parallels were drawn between the small size of Italians and their weak, womanly character.²¹

The vegetarian life reformers in general agreed on the fundamental principle that the consumption of meat by humans was unnatural and a violation of the natural and God-given order of peaceful coexistence of humans and animals. Living without eating meat appeared to be *true* humanity and the direct path to salvation. From the vegetarian point of view, hunting was seen as damaging the God-given harmony between humans, animals, and nature—as a brutal act. The vegetarians assumed and argued that people who killed innocent animals to feed themselves would not hesitate to murder humans, and would be more willing to instigate war. Meat's influence on character was also explained in terms of spoilage and illness. Even today these thoughts are shared by many vegetarians, although a fair number of them follow other motives, and this group's philosophy is labeled as *ethical vegetarianism*. However, by the beginning of the twentieth century vegetarians with a social-reformist bent had already highlighted the economic aspects of vegetarianism. Today, these are stressed over and over: producing meat means a waste of food energy, as one meat calorie

is based on a multifold amount of grain calories.²² With explicit reference to humoralism, meat was said to generate heat and to incite the passions, whereas vegetables were associated with a gentle temper. This resulted in specific, socially constructed images of meat eaters versus vegetarians: meat eaters depicted vegetarians as small, pale, and emaciated. In contrast, meat eaters were depicted as brimming with zest for life. It was for this reason that vegetarians participated extensively in sports, bodybuilding, and beauty contests in order to demonstrate and display their strength bodily health, as well as corporal beauty. The imagery went beyond Europe, and meat eating was on the political agenda of the modernizing Meiji emperors in Japan, for example.²³

Aesthetic standards and health concerns promoted many a dietary regime to combat issues of being overweight. Cures that combined the outdoors with water from mineral sources, and specific diets that excluded meat, made the reputation of spas across Europe and North America. The emerging upper-middle class flocked to such tourist hubs. Here, fasting took place in a reduced fashion, so to speak, as the patient's aim was to lose weight and recover vitality, not to control the soul in order to construct a path to the supernatural (such secular orientation notwithstanding, spiritual elements often permeated these places and animated their clients). Abstinence was temporary as its goal was to return to the outside world—better to move in it and cope with its constraints. In the mid-1880s, Lee Meriwether happened upon the “celebrated Milk-cure.” He remained aloof to the appeal of dieting but appreciated the music that came with its practice in Interlaken, Switzerland. Perhaps temporary self-restraint heightened the dieters' receptivity to such artistic accompaniment. Their pairing, however, was by no means accidental: reversing the saying *mens sana in corpore sano*, the restoration of the body benefitted from the care granted to the soul.

A German milk-cure is a curious thing. They are not so numerous as the *beer cures*, but they are interesting. A park, with shady walks and sparkling fountains, contains an airy pavilion, where, at six o'clock in the morning, frequenters of the cure assemble and drink milk fresh from the cow, and listen to excellent music. They get as full as possible of warm milk, then stroll around the park until ready to hold more, then go again to the pavilion, and take in loads of the lacteal fluid. In

any other country this would simply be called swilling milk; here it is a *cure*. Fat Germans bloated by beer, or overfed beef-eating Englishmen, go to Interlaken, live on milk a few weeks, give their overtaxed stomachs a rest, and pay high prices because it is a *cure*. Living on peasants' diet of black bread and milk would work a quicker cure, besides having the advantage of greater economy.²⁴

DISCIPLINING THE BODY TO CORRECT THE SOUL: PRISON DIET

Reeducating criminal offenders was an idea that gained ground in the course of the eighteenth century.²⁵ Food mattered because an ill-nourished body, it appeared to reformers, would remain unamendable to spiritual elevation. They also recognized that sufficient food was a necessary, if not sufficient condition for the return to moral integrity; it was, however, indispensable to maintaining an inmate's working capacity. At the same time it was clear that the food scheme was one way to discipline the body. Much of this followed religious ideas of avoiding indulgence and gluttony, as they both generate a loss of discipline. Simplicity was therefore one major characteristic of prison menus. Prison food clearly demonstrated that the prisoner was outside society. Criminal acts for which he or she was personally responsible had led to social marginalization. Punishment replicated that position: isolation and solitary eating formed part of the punishment. Food served to discipline. Alimentary fines were part of the prison system. Offenders of prison rules had the most precious food—meat—taken away, or were put on halved portions, whereas good conduct could lead to the permission to buy foods, and even such luxuries as the stimulants of coffee or tobacco.

When German prisons were reformed in the nineteenth century, this campaign went hand in hand with a thorough discussion of food schemes. The new diet had to respect the social order of meals; prisoners should by no means be given more than the honest worker, who toiled hard to earn his and his family's living. Consequently, new diet schemes were worked out, which were very much orientated towards the minimum of physiological needs. In this process, physicians played an important role as

experts. In a positive sense, they argued that a badly nourished body would not be able to work and, in fact, they were central figures in the whole reform process, as well as in the distribution of food in the institutions. What they observed was that prisoners could not make do with calories alone. Some convicts developed such a strong aversion to the monotonous and very simple prison food that they vomited when they saw or smelled the food about to be served. In such cases, physicians were authorized to prescribe additional foods, just like medicines.²⁶

Respect for food culture may have been on the physicians' minds, but disregard for food habits seemed standard procedure. It produced feelings of boredom and disgust. Autobiographies of prisoners stress the experience of hunger and deprivation. In Italy, where prison reform was lagging, economics determined the quantity and quality of prison food. Lee Meriwether met a former convict who remembered that he:

had only one meal a day, and often the soup was made of meat so bad I could not eat it—that is, not at first; but in San Stefano [the prison] when you do not eat, they keep the same soup and give it to you next day. You never get new soup until you eat all the old soup, so I eat the bad soup though my stomach turns. I was hungry, all the time hungry, and nothing to do—nothing. I sit and think and think until I go crazy.²⁷

Confinement made meals structure the prisoner's day. Separated from normal life, prisoners often self-monitored their bodies in detail. Prison reformers praised such introspection as the path to moral betterment. In fact it was this extreme divorce of body and soul that enabled the prisoners to take note of the existence of an inner life and about what was going inside their soul. This separation was sometimes pushed to extremes; for example, when prisoners described their feelings of hunger or discomfort (Meriwether noted "the pangs of semi-starvation" that prisoners mentioned to him). As some autobiographies report, this disjuncture allowed them to overcome the disgust of the food and the situation, and that appeared as the precondition for emotional and psychic survival. As one author wrote:

I aim to regard my body simply as a machine and the food as a material, which is needed to keep it. I swallow down my food preferably

without tasting it. Therefore I read while eating and I have resolved not to hunger any more, to eat at every possible occasion, to keep an even-tempered mood and to become similar to the ox in the stable. Thereby I hope to gain power again and—if I am really released next spring—to have gained some weight.²⁸

Where autobiographies describe eating situations in prisons, they compare them to the feeding of animals in a zoo. Deprivation combined with heteronomy in food questions, as the prisoners were totally dependent on the will of the authorities. In fact, the hunger strike was often seen as the sole means that prisoners had for protest, whether on the personal or the collective level. It expressed their rejection of their living conditions. The hunger strike of the English suffragettes is a well-known example of such protest.²⁹

IN THE LAST INSTANCE: *IST MAN, WAS MAN IßT?* / IS ONE WHAT ONE EATS?

In his much-cited phrase “is one what one eats,” the German philosopher Ludwig Feuerbach (1804–72) summarizes his fundamental critique of the philosophy and anthropology of his time, which had separated body and soul and put the soul above the body. In his publication “Against the dualism of body and soul, flesh and thought,” he argued against the Kantian opinion that human reality takes place in thinking. Instead he stated: “The body is the existence of man, to take away the body means to take the existence away, who is not sensual any more, is no more at all.”³⁰ This includes the need for a holistic view of man and his food—the need to accept that man is nothing without eating and food. Consequently, man must be thought of from the beginning of his existence; that is, from the mouth and the eating process, and not from the spirit. Soul and body should be reunited in order to fully acknowledge the value of a good meal. Feuerbach’s saying is cited worldwide, but his main point is usually lost: he strove to overcome the division between body and soul. The physician Moleschott shared the same goal. Ironically, in spite of its stated aim to provide the tools that would enhance the cultural life of the underprivileged, his *Physiologie* (1859) goaded the division of body and soul. It contributed to the

rise of the modern nutritional sciences, whose materialism (in a Feuerbachian sense) proved its downfall. Significantly, the new food paradigm called itself *rational*. It excluded emotional elements. It privileged a strict calculation of input and output, of investment in food and return in performance. The worker should be given a sufficient diet, but only to maximize productivity, not to gain access to different forms of leisure.³¹

The German saying *Essen und Trinken hält Leib und Seele zusammen* is unambiguous: food and drink keep body and soul together. They are the ties that bind the physical and the mental dimensions of human existence. Around 1900, physiologists pointed to the influence of food on the ability to concentrate. Having in mind that *plenus venter facile disputat de ieiuniis* (it is easy to argue in favor of fasting on a full stomach), the psychologist Hugo Münsterberg (1863–1916) put it bluntly: “If, according to the latin proverb, ‘*plenus venter non studet libenter*,’—a full stomach is not inclined to study—, certainly an empty one is less capable of it. The impossibility to instruct hungry children urges the necessity of feeding the pupils.”³² The absence of food, he argued, impedes life—metabolic as well as social. A shared meal is the best means to combine body and soul, substance and spirituality.

CHAPTER NINE

Food Representations

KOLLEEN M. GUY

Looking at a long sweep of history, we can argue that since the era of European maritime explorations and the respective acclimatization of flora and fauna that began with the Columbian exchange,¹ it became less necessary, at least in wealthier European countries, to fixate on accumulating basic foodstuffs in ever larger quantities, and it became more possible to measure power and social prestige in terms of consumption. Stephen Mennell points out that the advent of what might be seen as a global culinary culture in the age of nineteenth-century European empires made attitudes, rather than ingredients of overriding importance when it came to foods.² To be sure, inequalities left hungry minorities without the necessities of life in 1900 as in 1700, but the median level of agricultural provision was much higher than ever before in Europe and areas of white settlement controlled by Europeans. Increases in age-specific weight and height of Europeans and their satellite populations by the eve of the Great War indirectly disclosed this trend.³

Representations of food in the nineteenth century—from gastronomic texts, to novels, to cook books, to government pamphlets—reflect this movement in large parts of the European population toward post-subsistence attitudes. As long as hunger was the main concern of the majority of Europeans, discursive reflections emphasized production of core

foodstuffs. Cookbooks and gastronomic texts remained an imaginary world or a moralizing world (in the case of working-class, household-management guides) for those locked into cycles of hunger. The emerging culture of abundance in the age of capital, to use Hobsbawm's phrase, fundamentally shifted representations of food. European industrializing societies increasingly lived with the *crisis* of knowing what to do with *surplus*, not shortage. From the 1870s onward, technical change brought food in quantities and qualities greater than ever before; this was a period when demand rose but supply rose ever-more rapidly.

From these trends developed a rhetoric of progress and disaster, scarcity and abundance that remained remarkably static into the twentieth century.⁴ Surplus, much like dearth, did not eliminate fears; it reconfigured them. We can locate the shifting representational universe in the imperially fuelled world of improving consumption patterns for parts, though not for all of the European population. Gruesome depictions of famine, such as Goya's disturbing etchings in 1812, receded and gradually became the exception rather than the rule in the nineteenth century as Europeans increasingly focused on surplus rather than dearth. Food was linked with the health of individuals and that of the nation itself.

By the turn of the century, the emergence of a mass-circulation press and posters were vehicles for the circulation of new images of food as markers and makers of identity in an imperially driven world in which terrible poverty coexisted alongside expanding baskets of consumables and increasing real wages. Food producers made good use of the new media to try to shift the demand curve to the right through new products, branding, and advertising. Thus, new representations of food in an age of abundance were circulated ever-more widely through powerful new vectors of communication and information, from cable, to telegraph, to telephone, to newspaper, and magazine. In Paris, where he went to see actress Sarah Bernhardt on stage, Lee Meriwether was bemused by the "huge advertising placards" in most theaters (where he spent evenings to avoid unheated hotel rooms). "Advertisers," he noted, "pay liberally for the space on the curtains of the large theaters." The age of mechanical reproduction brought food and advertising together in a new and inextricable embrace. According to Meriwether, this proved both interesting and profitable.⁵

ABUNDANCE AND DEARTH

Thomas Robert Malthus's expectation that population growth would eventually outpace food production and revive hunger lost much of its credence as the century progressed. In Europe by the end of the century, most Europeans would take for granted that modern capitalist production and imperial expansion had brought an end to the Malthusian cycle for them, at least; in the aggregate, Europeans achieved lasting abundance, even if in some places there were still periodic shortages and waves of hunger.⁶ Yet, it was entirely appropriate that middle-class and upper-class Europeans, especially in a still church-going age, felt guilt or anxiety that even where there were overflowing market baskets, not everybody was well supplied with food. Hunger and malnutrition in nineteenth-century Europe coexisted with income growth and a culture of abundance. If aggregate food supplies rose, as did levels of consumption, periodic crises of starvation, while less frequent, were not unknown. The most conservative estimates are that starvation killed more than 100 million people globally during the nineteenth century; Europeans made up only a small percentage of that number. The Irish Potato Famine of 1847, the poor harvests in Finland in 1868, and the Russian famine of 1891–92 were the major European famines contributing to those numbers.⁷ These were not the last major food crises in Europe. These were perhaps the last of one type of famine, but other types of famine, particularly famine caused by war and civil war, were all too present.⁸

Representations of famine and hunger demonstrate a nineteenth-century revulsion toward graphic depictions. Gruesome pictorial depictions of famine were exceptional. None of the images of the Irish Potato Famine of 1847, for example, would have the same horrific resonance as Goya's depiction of the Spanish famine. Literary representations, too, would show uneasiness with the stark choices of those that were hungry and the anti-social behaviors (such as crime, for example) that came with dearth. Representations of hunger could create as much revulsion as compassion.

Imagery of the Irish Potato Famine captures this revulsion and compassion, guilt and anxiety about shortages and abundance. Scholars note that the literature that depicted hunger during this time period is marked by

incomplete, disjointed images. Writers of fiction and journalism, mostly upper-class men and women, rather than victims of the famine, described *feminized* scenes of passive suffering—a starving child or a cottage with emaciated inhabitants. Women and children were represented as hunger’s primary victims, although evidence suggests that in this famine, as in so many others, men and boys were the most likely to perish.⁹ Famines were seen as a sign of economic backwardness. And it was assumed that there would be a hierarchy of death; as Karl Marx noted, the Great Irish Famine killed “poor devils only.”¹⁰ This probably explains why critics focused more on the ethics of wealth distribution than on the economics of wealth creation, or the obstacles to growth. Their descriptions carried moral messages about food and hunger, not economic ones.

By the 1850s and onward, the tone of contemporary writing on hunger shifted. Uncertainty was commonplace as to what the future held, but the direction of comments was toward moral and human uplift and improvement. European physiologists, chemists, and doctors, for example, created models of nutrition that sought to maximize productivity and render European bodies more economical and efficient. Hunger was a matter of management, of chemicals in the body through food choice and household economics.¹¹ Christian sentiment buttressed the new science of food and hunger with moral messages. Men such as Anthony Trollope in *Castle Richmond* (1860) sympathized with the victims of the famine of 1847, but, at the same time, they could still see the famine as a “blessing in disguise” for the Irish that would create the suffering necessary for the emergence of a more equitable social order.

Abundance had changed attitudes toward hunger and dearth in other ways too. Eye-witness accounts narrating the famine, for example, were often dismissed by contemporary, more conservative, readers who at times considered the reports exaggerated by those mustering sympathy for the Irish among the British, or to urge the revolt of the Irish against the British. The language of hunger became *parti pris*, mobilized by those desiring radical change, and treated with suspicion by those against it. Friedrich Engels, educated by Protestant Pietists, in his chronicles of hunger in working-class hovels in Manchester in 1844, treated it in this partisan manner. Louis-René Villermé, writing at the same time about hunger in the northern French textile cities of Lille and Roubaix, is perhaps more representative of

the competing impulses within Christianity. He saw hunger as a result of individual failings and moral shortcomings, while intimating that material conditions were connected with low wages. Christianity could simultaneously approach hunger as both a character flaw and a matter of economic inequalities.

Hunger, like abundance came to be configured as a matter both of personal destiny and of social determinism. Novels of the era offered the middle class an opportunity to read about both, in the comfort of their own homes, in order to savor “the pedestrian description of everyday reality.”¹² The key point is the message that poor people are trapped in a system that makes them hungry; it is not their fault, but they are punished for it anyway. Hunger stalks the poor in many nineteenth-century novels subjecting them to a “a life sentence in the prison of hunger.”¹³ The lives of the poor were shown to be largely shaped by the wretched environments of the newly industrialized cities, but most plots followed Dickens’s depiction of *Oliver Twist*—the boy who asked for *more*—as exemplary stories of people’s resilience and their individual struggles to overcome adversities. Collective struggles were almost always absent; this was the terrain of the individual Christian conscience. There was unquestionably a kind of gastronomy based on hunger, where people made do with the root of milk thistle boiled with mint or innovated folk practices using herbs from ditches because of pangs of hunger.¹⁴ Hunger remained, in many ways, like Knut Hamsun’s successful novel of the same name, a monologue, a physical and psychological struggle of the individual. For the most part, social justice was a matter of individual fortitude and the individual pirouette towards decency (and food).

Implicit is the belief in many such works of moral comment as to the imminent arrival of food and progress. Adequate consumption is just around the corner, as it were, and will arrive if decency prevails among the poor. Revolution is not decency, to be sure. *Hard Times* presage better times. By the time Dickens’ novel of that name appeared, the worst years of the 1840s were over and starvation became a problem *over there*, in the colonies where photographs captured the misery. Dietary science in the colonies became starvation science, where the interest was not in the management of life but the management of death. Deficiencies that produced malnutrition or starvation were seen as endemic to the colonial environment or to

a race, with some races more susceptible than others. Such attitudes are clearly visible in colonial policies, such as the “Temple Ration,” developed in response to the Madras famine of 1877–78, where the goal was not to maintain a subjects’ health but to barely avoid mortality.¹⁵ The imperial age that brought abundance and diversity to the European diet also brought with it the development of a core set of racially shaped beliefs that linked food, progress, and empire. The fate of the subjugated peoples of the world was to endure one food regime; those who were in the hegemonic powers, the “Lords of Human Kind” in Victor Kiernan’s phrase, defined their lives in the metropolis in terms of those impoverished and undernourished millions in the periphery. Representations of food in abundance up “north” were put into high relief by representations of death and hunger in the “south.”¹⁶

HEALTH AND THE SOCIAL BODY

Dietary science developed in conjunction with new ways of imagining individual transformation and, by extension, the possibility of shaping the destiny of the race or nation through consuming differently.¹⁷ Evangelicals led the way with the aim of transformation of the individual self through a ceaseless struggle to live a spiritual life where every action, every choice, and every thought could be seen as a path to salvation. Putting one’s own house in order by bringing the Savior’s teachings to the minutia of daily life was seen as an essential prerequisite to a revolution of manners and morals that would follow at the national level. The details of household management, including meals and food choices, were to be in keeping with Christian principles of frugality and restraint. Hannah Moore’s tales of *The Stanleys*, the perfect religious family, depicted the Christian ideal of moderate food and drink consumption within a family infused with moral purpose. Mr. Stanley was determined to fulfill his duties of father, husband, and landlord by avoiding the decadence of a life preoccupied with hunting, drink, and sumptuous meals late at night. His success was bolstered by Mrs. Stanley’s ability to efficiently fulfill her duties within the home through the kitchen.

Homemakers’ manuals destined for Protestants and Catholics alike stressed the importance of the mistress of the house in creating not only

an agreeable atmosphere, especially for the men, but also a civilized home where the food offered at meals was a source of dignified pleasure. The benefits of a civilized family mealtime would extend from the soul to one's bodily health, aiding digestion, assuring longevity, and producing rational minds. Madame Celnart instructed bourgeois French women in her *Manuel des dames* (1833) that "experience and what we know about prolonging life suggest that this time be devoted to gaiety so as to make digestion easy and unobtrusive."¹⁸ The family meal became a marker of health and a measure of civility. Women were expected to assure this balance through careful food selection and meal service based on a form of "scientific motherhood," or the reliance on expert scientific and medical advice to rationalize the kitchen, organize meals, and serve children healthful foods. The kitchen was central to maintaining the health and well-being of their family.¹⁹

Household manuals, tracts, pamphlets, and journals were essential in educating women in this new *savoir-vivre*. Throughout the century, these largely urban, middle-class attitudes about eating, salvation, and health extended to ever-broader segments of the population. Institutions of both church and state focused their attention on the family table as a key element in producing morally and physically healthy bodies. In a growing culture of abundance, religious institutions directed attention to the need for self-restraint either through observance of fasts or food prohibitions (as in both Catholicism and Judaism), or through moral restraint (such as the temperance movement). Schools and the military became secular vehicles for shifting and shaping food choices.²⁰

Relying on scientific advice could bring its own set of anxieties with nutritional science still in its infancy and a new culture of abundance shifting norms regarding consumption. Specialists debated the fundamental impact of culinary styles or individual foods on the body. Some foods, such as chocolate, would lose their status as a drug, moving from the shelves of the apothecaries and pharmacists to the grocer's shelf via mass production.²¹ Other foods and beverages, such as sugar, coffee, and colas, retained a quasi-medicinal status as researchers linked them to superior physical performance and physical well-being.²² Receptiveness to the new food science, even with the state mobilizing resources, was not always enough to shift culinary inclinations. Scientists might aim at shifting food intake to create energy sufficient for varied work requirements or collective well-being, but

families and individuals were not always quick to adopt new consumption norms. Efforts to increase sugar in the diets of the French working classes, for example, in the guise of increasing energy and endurance, was a battle for educators, scientists, and sugar manufacturers. The Parisian lower classes rejected these efforts, believing that sweets spoiled both appetites and teeth (attitudes that were rejected by physicians at the time).²³ Abundance created choices and consumers still exercised a fair level of autonomy in making them.

Anxiety about those choices, however, remained. By the end of the nineteenth century, there was a veritable revolution in concerns about hygiene at the state level that served to justify more direct government involvement in food supply and demand.²⁴ Rhetoric linked food to a healthy national body. Wine in France, for example, came to be seen as the *boisson hygiénique*, the key to both personal and national health. Scientific and medical studies concluded that the best solution for rejuvenating the individual and the nation was to create stricter state controls of distilled beverages, such as spirits and absinthe, while *increasing* distribution of wine.²⁵ A regularly cited study of the French military garrison in Bordeaux concluded that soldiers who marched after drinking wine were “less tired and went along the road singing and chanting refrains in cadence.” This was in sharp contrast to beer-drinking soldiers who were “sluggish, marched with a heavy step...and reached the finishing point worn out, exhausted.”²⁶ In light of this scientific evidence, the Academy of Medicine endorsed government efforts to increase wine consumption. The progressive, though incomplete, medicalization of society had given the state a new authority to legislate and intervene. Far from being a cause of decline and social disorder, wine and food were deemed the source of national renewal.

The fate of nations appeared to depend on food and drink. It is important to note that this was an era when international congresses and exhibitions served as forums for the exchange of ideas, networking, and popularizing knowledge about health, hygiene, and food trade. While evidence suggests that there was more transnational cooperation than historians have acknowledged, strategies and policies were still primarily formulated and implemented at the level of the nation-state.²⁷ The shift in British policy toward milk, for example, came from transnational awareness and concerns

over milk purity and physical degeneration. While the fears were shared across Europe and North America, the response was formulated for mainland Britain (as opposed to the Empire) by the Edwardian and Georgian governments in the form of Infant Welfare Centres and Milk Depots, and measures of health and unemployment insurance. The biological characteristics of the population were set at home and in infancy; that home was a British one.²⁸

Other liberal states created publicly funded centers where mothers could obtain bottles of sterilized milk at reduced prices. Poor children got free meals at public schools, and their grandparents received the first old-age pensions. Looking after granny no longer took food away from her grandchildren. Such interventions in consumption set important precedents for the role of the welfare state in the twentieth century. The governments of European nation-states took an active role in shaping consumption in other ways too: by intervening to license distribution of food and drink, setting high excise duties to shape markets, regulating operating hours for bars, cafes, and restaurants, or taking over the management of water supplies.

Food, in this way, played an important role in the way contemporaries imagined the social body of the nation and measured its collective health. The nation-state collected and distributed information to its citizens that reinforced the notion of a collective fate beginning at the dinner table. Statistics were one way that bureaucrats and politicians of the nation-state came to understand their subjects and citizens, and the bonds that they shared. Official statistics reflect shifting nineteenth-century representations of food. At the beginning of the century, official reports and their subsequent reproduction in popular media dealt primarily with the consumption of important basic foodstuffs. Statisticians tried to capture wholesale prices (for example, for grain and bread) and annual, per capita supply, often using average harvest incomes, weights, and trade and population statistics. By the end of the century, statistical calculations reflected the concerns of the age of mass politics and global empires. Social statistics became the norm throughout Europe. What mattered when it came to food was two-fold: the buying power of the consumer and the strength of export markets to absorb European agricultural surplus. Both were the key to producing the image, if not always the reality, of a strong, healthy national body.

IDENTITIES

If a nation's existence was a daily plebiscite, as Ernest Renan proclaimed, then the plebiscite took place increasingly at the table and in the pub. Food and cuisine was one of the few forms through which people lived their daily lives that also came to be regarded as a national heritage. By the high tide of European imperialism and increasing food imports from all over the world, food was “a highly condensed social fact” and a “marvelously plastic kind of collective representation.”²⁹ It signaled rank and rivalry, solidarity and community, identity and exclusion. Food also had the capacity to mobilize strong emotions. It was the combination of the plasticity of the representation and the affective capacity of food that made it a potent political tool. Food was power, especially imperial power. This power came not simply from control of consumption, production, or distribution, but also from the links between food and a sense of a gastronomic *us* and *them*. Cuisine was increasingly viewed as a distinctive expression of an ethnic group or a nation.³⁰

Culinary choices can, of course, be unselfconscious, a simple act of meeting a basic, daily need. Cuisine can also be part of the “national imagination, a set of public, political, performative, symbolic discourses.”³¹ Evidence suggests that the reflective and non-reflective aspects are difficult to separate. At a time when nations were inventing traditions that promised authentic belonging, consumers could be sensitive to questions of authenticity of their foods. Was it *genuine* French champagne? Was this *authentic* Italian *pecorino romano*? Was this *Naturwein* (pure wine) or a *Kunstwein* (artificial wine) threatening degeneration of German wine culture? Authentication regimes concerning food were slightly different from those that governed industrial goods because, with the elongation of the food chain, they registered “profound concerns about risk and trust.”³² The single largest concern in the German wine trade in the second half of the nineteenth century, for example, was the so-called *Kunstweinfrage*, or artificial-wine question. Impoverished vintners of the Mosel River Valley adopted a French technique of adding sugar to the grape must to reduce the bracing acidity of unripe grapes. This set off a virulent reaction, using stereotypes about the French and foreign pollution to discredit the makers of so-called artificial wines—wine makers lobbied for national legislation that would define and protect the so-called authentic German wine.

Nationalism in the Age of Empire gave food both an imperial and a moral dimension that set it apart from other commodities. Food markets were imagined as national, even as the food sector saw global market integration. Colonial expansion in the late nineteenth-century elongated food chains and brought a major shift in the relationship between European metropolises and the colonies. Colonial settler regimes producing basic food-stuffs readily available in Europe, such as meat and wine, supplemented the older colonial system of cultivation of exotic goods. Mechanical refrigeration (applied around 1880) brought perishable food, such as meat, fish, and fresh produce, into this market matrix. Global market integration had different outcomes and effects across Europe depending on factor endowment, geography, and market access. Some goods, such as West Indian sugar, for example, lost their exotic status and market advantage when European domestic growers of beets succeeded in creating a product indistinguishable from cane sugar and captured almost 45 percent of world sugar production.³³ Between 1870 and 1913, output of agriculture grew at a high rate all over the world, but was particularly strong in South America, Eastern Europe, and areas of European colonial settlement.³⁴

An increasing proportion of food exports from Africa and Asia went to Europe and North America. Some products, such as rum, cocoa, chocolate, and coffee, became ever-more affordable so as to make them available for mass consumption. Companies vied to capture this broader consumer market by adopting new strategies for selling goods. In the case of colonial goods, marketers and manufacturers attempted to sell colonialism itself and a whiff of luxury based on a certain nostalgia for slave regimes. Packaging and posters recalled imperial slave regimes and displayed the racial hierarchies that elevated white above black. Regardless of the class inequities in the metropolis, advertisers and manufacturers could contrast white with black in such a way as to elevate all white Europeans to a position as master. Luxury could be evoked by associating a product with black slave labor (and the consumer, by extension, with the white master). Rum labels did this most directly. Packaging for rum commonly depicted half-naked, black dockworkers carrying casks to ships in a West Indian port and exotic Creole beauties holding out a serving of the caramel-colored nectar to the thirsty European consumer. Black males were tamed, brute labor; black women were objectified as a Black Venus.

Imports of chocolate from colonial Africa extended this white consumption of blackness with infantile imagery on packages and posters in the form of little black servants (the centerpiece of advertising for the German firm Sarotti) or small, subservient black children that evoked Scottish author Helen Bannerman's fictional Little Black Sambo. The French cocoa-based breakfast food, Banania, broke with this trend with the adult Bonhomme Banania in 1917. But this was only after the propaganda of the Great War had created sympathy for the *Tirailleurs Sénégalais*, upon which the image is based. In everyday German culture, blacks were figuratively consumed in the form of *Mohrköpfe* and *Negerküsse*, which were two different sorts of cream-filled chocolate cakes. Advertisers used depictions of black labor, in one form or another, consistently for the marketing of coffee. White consumption of blackness developed alongside colonial ambitions and market competition.³⁵

Imperial ideology held that colonial food abundance came from a combination of the natural fertility of the soil in tropical climates and the disciplining of black labor through white colonial rule. It was fecundity that brought bananas, coconuts, melons, pineapples, and other tropical fruits to the European dinner table by the end of the century. It was poor land management and laziness by natives that produced drought and desertification.³⁶ The moralizing Anthony Trollope exemplified these common racialized views in the 1860s. Reporting on his tour of the West Indies, he explained that the black "is idle, unambitious as to worldly position, sensual and content with little... He lies under the mango-tree, and eats the luscious fruit in the sun; he sends his black urchin up for breakfast and behold the family table is spread."³⁷ To assure that the plenty was not wasted, the natural laziness of the *black* and of *coloreds* had to be corrected with European discipline and dominance.

Business leaders looked for other tools to increase profit margins at a time of globalization of the food industry when food was becoming very big international business and marketing became a key aspect of economic growth. International flows of food and increased competition from New World and colonial agriculture challenged the market dominance of many local and regional agriculture products. Global competition meant new marketing opportunities, but it could also mean falling prices and decreased market share. Some food industries, such as wine, found themselves in deep

crisis by 1900. Survival in the new marketplace hinged on the ability to find a new niche with consumers. Some regional producers turned to the linkage with the nation to regain their advantage. These were not to be simply objects for consumption, but part of a culinary heritage that meant national strength, superior health, and overall product quality. Producers sought to anchor products into a growing popular enthusiasm for the nation and its empire.

In this way, producers and consumers of agricultural products were complicit in imagining a national culture of ingestion. By the 1900s, improvements in transport, new processing techniques, and reduced production costs made it possible to market formerly local European specialties—Riesling, Roquefort, Porto—to an ever-broader group of consumers at home and abroad. And there was a growing and more diversified consumer market that valued these formerly local or regional products.³⁸ Some of these products developed reputations for excellence that extended far beyond their immediate production area or the boundaries of the nation.

Here we see the emergence of the symbolic languages of the local to enable producers and consumers to differentiate their supposedly special tastes and products from the rest. As the food chain increasingly appeared as an industrialized commodity chain, European products with local or regional identities were marketed as *traditional* or *authentic*. Many of these claims to authenticity are products of what Hobsbawm and Ranger have called *invented traditions*. It is perhaps not surprising that the first European attempts at authentication regimes—such as the Madrid Conference on trademarks in 1890–91—arose in the same period as nations were anchoring their new political forms in supposedly ancient practices and ceremonies, all newly hatched for the purpose. The emerging body of law on collective trademarks and protection of food appellations, in this way, was an expression to a set of cultural beliefs about the imaginary, but for that very reason all the more important historic and geographic relationship between the nation and food.

Food preferences were not incidental to a sense of self distinct from the nation. Gastronomic literature, cook books, and tourist guides, by the turn of the century, offered subjective evaluations of food or taste that exposed the hierarchical structure of most European nations. Changes in food selection, preparation, and consumption over the course of the century, it has

been argued by historians such as Jean-Louis Flandrin, cannot be traced back directly to bodily factors or be fully accounted for by economic disparities. Decisions about what was edible and inedible, desirable or disgusting went beyond nutritional value. There was a cultural mediation to which alimentary choices were subject. Over the course of the century, taste professionals in Europe increasingly equated the quality and taste of food (as opposed to the mere quantity) with identity, and identity meant what well-to-do people saw when they looked in the mirror. As always, *taste* was the property of the propertied, though the less well off were invited to imitate at will.

The growth of rankings and consumer-oriented food writing signaled, in many ways, a more educated and sophisticated middle- and upper-class consumer. While the consumer market for undifferentiated agricultural products, such as sugar or tea, continued to grow at the end of the nineteenth century, there was also a recognizable consumer culture for up-scale luxury products. Increased urbanization and industrialization over the course of the century seemed to produce a consumer culture for wine and food where the emphasis on the rural, provincial roots of taste and quality became more pronounced. Bottled wines from Europe as well as Canada and Australia, for example, often achieved this through the use of the *château* label. The *château* as representative of something solid and permanent (and noble) appears to have appealed to consumers in a rapidly industrializing society. Place represented consistent, reliable quality for consumers and emerged as the key to wine marketing strategies. Consumer interest in regional wines became so popular that *châteaux* producers developed wine-cellar tours, and travel guides made vineyard visits an essential part of the tourist itinerary. Wine was part of a popular culture of ingestion, filled with possibilities of confusing pilgrimage with tourism, and expenditure with both.

Discursive representations remained very much shaped by a class prejudice that was extended to foodstuffs.³⁹ Famous gastronomes in Italy and France, for example, appear to have largely ignored all but a few cheeses until the turn of the century. Cheese, it was claimed in medical literature, took on the “dark and bilious destiny fermented in peasant blood.”⁴⁰ Most cheese produced in Europe until the 1900s was destined for auto-consumption by the rural populations. With the exception of a few *noble*

or bourgeois cheeses—such as Brie and Roquefort—which found their way onto chic tables, most cheeses were largely undistinguished.⁴¹ Those who tended herds of goats and cows and made cheeses appear in the historical record of these years as brutish. Cheese was a food for peasants, herdsmen, woodsmen, and savage people who verged on the animal condition.⁴² Cheese, in this way, sat at that juncture between barbarism and civilization; that is, until twentieth-century marketers blurred the distinction between the two.

Advertising with the use of brand names was one way in which to distance a food product from peasant or ignoble origins. As awareness of the dangers of food adulteration or fears of health risks increased, individual and company names became the agents of trust. Brands in nineteenth-century Europe might be a family name or a collective mark that denoted a place of production (such as Roquefort or Mosel). The family name was a form of personal assurance of the quality and uniqueness of a product that emerged about mid-century. It would only be after the 1880s—as European producers began to face greater competition—that industries began to actively use collective trademarks (often linked to geographic place) to carve out niche markets. Brands and collective marks became a part of a repertoire of symbolic devices that were used to delineate social boundaries and, increasingly, in the highly patriotic atmosphere before 1914, link food products with the nation. In the changing world of the late nineteenth century, brand names and specialty food products (like other material goods) denoting social status became important in creating a sense of group identity, whether that was an identity of class, an ethnic group, a race, or nation. Advertising transferred authority and legitimacy to branded goods.⁴³

Manufacturers took advantage of this legitimacy to instruct consumers. Ad campaigns might instruct a consumer on how to properly use a product or explain health benefits.⁴⁴ Others used imagery as well as small collectibles, such as stamps or small metal toys, to appeal directly to children.⁴⁵ Brands allowed food processors and distributors to insert themselves into commodity chains and, in many ways, supersede the producers of foodstuffs in the minds of consumers at home and abroad. Gradually the agent of quality “appropriated the role of the producer, a process that was easily furthered if the agent was responsible for mixing, processing and packaging.”⁴⁶

Yet, food chains in the Age of Empire were not simply commodity chains. Public debates throughout Europe about tariffs and forms of protective legislation by the end of the century had as much to do with the economics of shifting ebbs and flows of supply as it did with two conflicting ethical impulses. For consumers, elongated food chains could create new conveniences, an emancipation from nature (with the introduction of canned goods), and greater dietary variety at lower costs. Elongation could also create uncertainty as to the origins, purity, and quality of their food supply. Middlemen were not always seen as the guarantor of quality and the specter of excess profits, artificial shortages, and dubious quality produced consumer anxieties and demands for market regulation.⁴⁷

Public discourse and food representations captured the way that eating highlighted this ethical dilemma “between opening out and caring for distant others, on the one hand, and focusing on the nearest and dearest closest to home, on the other.”⁴⁸ We should perhaps not be surprised that this period of intense optimism and anxiety about the global expansion of the food commodity chain before 1914 was followed by blockade, hunger, and at times in Eastern and southern Europe, starvation, in which food was used as a weapon of total war.

CONCLUSION

Representations of food in the nineteenth century changed when food chains and information networks lengthened to encompass the world. Plenty replaced scarcity in most places and in most representations, and the notion of a state or empire advancing, in Napoleon’s rude Corsican image, on its belly, took on new meanings toward the end of the nineteenth century. Food consumption described the way nations defended their honor as well as their bread, though we must be cautious about conflating different national and regional stories into one homogenized whole.

Differing religious and evangelical traditions injected morality into food discourse in different ways. Hunger never vanished completely, but the path to improvement and satiety never diverged from the Christian way. Above all, the defense of home markets and producers became national obsessions at a moment when national competition in arms and empires

grew more and more intense. Quality control and branding became institutionalized patriotism, and gave to marketers a flag to wave as they counted their cash. Food follows the flag, to be sure, but the flag follows food just as frequently. It did so into the trenches of 1914, ending the long nineteenth century but not the global reach of European food networks.

CHAPTER TEN

World Food: The Age of Empire c. 1800–1920

FABIO PARASECOLI

The Age of Empire saw an increase in the speed and the volume of exchanges and transfers of ingredients, materials, techniques, ideas, values, and practices related to food and eating, which became more frequent than ever before. This chapter aims to provide a panoramic view of the dynamics shaping the periphery of the imperialistic project, and to highlight how events taking place far from the political centers of the world influenced the system as a whole. Without any pretense at being exhaustive, the chapter will, rather, focus on various cases and examples—on different scales and registers, from the continental to the local—to tease out those elements in terms of changes in productive structures, scientific accomplishments, and socio-political events that can be useful in achieving a better understanding of the cultural and culinary trends of the period.

Along with the economic and political establishment of empires, European ingredients and culinary traditions acquired worldwide prestige, often proposed to or imposed on foreign populations as a tangible aspect of Western cultural and moral superiority. All over the colonial world, from India to Belize, foods of European origin were preferred to local ones by the ruling classes, to the point that at times products were

exported to the motherland and then re-imported as high-status delicacies.¹ The French model of culinary excellence in terms of dishes, organization of service, décor, and service acquired particularly high status, not only in other European countries but also in diverse locations at the periphery of the world-system. For instance, in Indochina, wheat baguettes, pastries, sausages, and even asparagus became quite popular in urban centers, mixed by the locals with their traditional dishes and ingredients.² French *haute cuisine* was also all the rage all over Latin America, from Mexico to Argentina, where the new Creole elites were trying to acquire global visibility and to increase their distance from the Indian and Mestizo populations.³ For example, traditional foods such as Mexican tortillas were considered suspicious by the local upper classes (backed by the Catholic Church), a material symbol of backwardness and, at times, even of actual racial inferiority.⁴ Elsewhere, however, the elites proved impermeable to the French culinary penetration, as the following sections will illustrate. What changes in the economic and political structure of the empires were at the root of the global phenomena that left such a profound trace on food cultures all over the world?

PLANTATIONS WITHOUT SLAVES

During the nineteenth century, the improvement in communication technologies and transportation boosted international trade as well as expanded colonial empires. Following the growth of consumer markets, the urbanization, and the industrialization of food production in most Western European countries and later in the United States and Japan, the demand for commercial crops—beginning during the sixteenth century—grew exponentially both in extension and in levels of organization. Agricultural exploitation of African, Asian, and Caribbean colonies became just one aspect of the complex and unequal cultural, political, and economic relationships that constituted imperialism. The production and consumption of tropical commercial crops such as sugar, chocolate, and coffee exemplified colonial relationships. As the imperialist powers ensured cheap and reliable sources, these goods, previously limited to the upper classes, became available to all walks of society. Toward the end of the century, commodity sales were organized in structured markets,

with the actual grading of the products and the establishment of international standards.⁵

At the beginning of the nineteenth century, many of these products—especially sugar in the Americas—were still grown by slaves in what has been defined as the *plantation complex*, a production model that was dismantled with the abolition of slavery, despite the strong resistance from colonial landowners.⁶ The abolition of slavery—jumpstarted by the Haitian revolution in 1804—ended only in the late 1880s with the elimination of slavery in Cuba and Brazil. Some Caribbean colonies shifted from sugar to other crops such as bananas, pineapples, nutmeg, and coffee—for which demand was growing in Europe—while in others, such as Jamaica, plantations were divided among small farmers. As a consequence, the geography of sugarcane cultivation expanded noticeably, with intensive cultivations established from Guyana and Trinidad, to coastal Peru and Mauritius, from Natal in South Africa and Reunion, all the way to Queensland in northern Australia and Hawaii.⁷

Taking advantage of the opening of the British sugar market to foreign crops in 1846, Cuba, Puerto Rico, and Brazil became the most important sugar producers in the Americas and temporarily the major importers of slaves, even after Cuba introduced mechanization and new technologies in the 1820s. Later on, to maintain the plantations that the freed slaves often refused to cultivate, landowners had to resort to forms of coercion such as contract labor or debt peonage, bringing workers from India to Jamaica, Guyana, Trinidad, Reunion, and Natal, while Chinese peasants moved to Jamaica, Cuba, and locations as diverse as the valleys of the Peruvian coast, Java, and Hawaii. These new massive movements influenced the development of culinary traditions. When the Indians arrived in the Americas, some of their traditional ingredients such as mangoes and tamarind had already been introduced by the British colonial authorities that were always eager to maximize the agricultural potential of their territories. While Chinese food traditions did not greatly impact the local cuisines (with the exception of maybe pickled vegetables and the use of soy sauce for some meat marinades), Indian culinary habits and techniques left an indelible mark. What would Caribbean cuisines be without curries and rotis?⁸ We can also mention, for instance, the Chino-Latino cuisine that flourished in Cuba and just barely survives in the Cuban diaspora in the United States.⁹

As international sugar prices slumped due to increased availability and diffusion of beet sugar, coffee cultivations turned out to be extremely profitable, expanding in the Eastern regions of Cuba and especially in Sao Paulo, Rio de Janeiro, and Minas Gerais in Brazil, the country that became the most important supplier for the United States.¹⁰ Coffee plantations, usually smaller than sugar estates, also attracted immigrants from Europe, increasing ethnic variety and developing local cuisines that absorbed colonial traditions and elements from the Old World, as in the case of the Brazilian *feijoada*.¹¹ Coffee also thrived in Dutch Java, in British Ceylon, and in French Reunion. In African territories such as the Congo and Angola, local populations often switched from the production of manioc, maize, and beans for subsistence—a result of the diminishing slave market—to coffee and peanuts for the global market, thus not only participating in cash economies but also making themselves more vulnerable to droughts and famines, which had devastating consequences on farmers that based their livelihood on monocultures.¹²

The cultivation of *forastero* cocoa—first introduced on the islands of São Tomé and Fernando Pó (now Bioko)—penetrated Africa, often opening up tracts of previously uncultivated forest.¹³ Due to internal migration of peasants and changes of land tenure and labor organization, with great consequences on pre-existing social structures, Ghana and West Nigeria became the major cocoa exporters by the 1890s, followed by the Ivory Coast.¹⁴

The economic exploitation of colonies became increasingly systematic, with cultivations established where they could enjoy a comparative advantage in terms of productivity and crop value in the market. For instance, once the French made rice production a priority in their Indochina territories, and the British likewise in Lower Burma, it became more convenient for the neighboring islands under Dutch control, such as Java, to buy rice to be sold to farmers that could then switch from traditional cultivations, including rice, to export crops such as sugar.¹⁵ Rice from Indochina was also imported into French West Africa, where peanut cultivation expanded, shifting labor away from staple production for subsistence and local trade.¹⁶ Colonial rule also ensured that greater shares of the peasants' production went to the foreign authorities, which were often more efficient and better organized in collecting taxes than their pre-colonial predecessors; as a consequence, life conditions worsened for farmers and unrest and

riots increased, despite the fact that the occupants had access to modern weaponry as a means of repression, often affecting production negatively.¹⁷

AFRICA

Despite the integration of the East Coast in the Indian Ocean seafaring routes since Antiquity, despite the presence of regular Muslim traders across the Sahara from the eighth century, and despite the arrival of Western ships on the West coasts in the fifteenth century, the interior of Africa remained relatively isolated until the end of the eighteenth century, due to the environmental barriers and diseases such as malaria, yellow fever, or trypanosomes carried by the tsetse fly.¹⁸ In the nineteenth century, however, the continent witnessed a clear transition in the model of control of Western powers from the trading-post model within coastal areas, to territorial empires with settlement colonies where Europeans slowly penetrated toward the interior.

The abolition of slavery overseas decelerated the depopulation of Africa, one of the main causes of the low productivity of local agricultures. The commerce in agricultural commodities developed at first along the lines of the slave trade; the Europeans would advance goods on credit to the coastal intermediaries that would travel inland to buy the goods. Over time, the growing demand for the crops needed for growing industrial production in Europe led to more systematic explorations of Africa's interior to identify sources of supply, to establish commercial plantations under European management, and to create direct trade ties to bypass the local intermediaries. This, in turn, gave way to the direct colonization of some areas. Rivalries between the European powers escalated to the point that in 1884 they established their spheres of influence at a congress in Berlin.

Technological advances turned some African products into cash crops, such as cloves, rubber, palm oil in Cameroon and in the Niger Delta (used mainly as machine lubricant), and peanuts all over West Africa.¹⁹ The growing requests for these commodities, however, generated a greater demand for internal slaves, procured by war and raids that had a negative impact on subsistence agriculture.²⁰ The imposition of colonial order heavily affected food foraging, including hunting—which was often banned because weapons were illegal—while traditional communal production was threatened by the commercialization of agriculture and the introduction of the

cash economy, eliminating social safety nets in case of famines or market crises ushered in by the introduction of monocultures.²¹ However, focusing the analysis on more localized dynamics, it appears that in some specific cases the presence of new colonial powers stimulated the cultivation of traditional plants, such as sorghum in the Mazega area at the border of Ethiopia, Eritrea, and Sudan.²² Some areas benefited from the participation in the global economy through commercial crops. The kingdom of Shawa, predecessor of the Ethiopian Empire, for instance, took advantage of the growing demand for coffee to establish its production on the international markets—a position that the country enjoys to this day.²³

In South Africa, where the Boers of European descent had settled since the seventeenth century, the incorporation of the local production of sheep (Cape Colony) and sugar (Natal) into global flows of trade led to the expansion of the colonists' presence in the African interior in what came to be known as the Great Trek, characterized by inevitable clashes with the local tribes.²⁴ Sierra Leone, created as a British colony populated by freed slaves, turned into a success story, with a solid production of rice for internal consumption, and commercial cash crops such as ginger and sugar. However, nearby Liberia, founded in 1824 by the American Colonization Society with similar goals, did not experience the same agricultural development, remaining in a state of dependency.²⁵

The growing presence of European authorities, merchants, and missionaries in the urban trading centers created a new local elite of educated Africans that played a huge role in the spreading of Western foodways and food products, which were often considered superior and more refined compared to the traditional ones.²⁶ For their part, the Western powers invested in research to determine what would be the best diet for the colonizers destined to manage and work the overseas territories, basing their approach on the intrinsic superiority of European food from both the cultural and nutritional point of view.²⁷

CHINA

The nineteenth century saw the progressive encroachment of foreign powers in the Chinese territory following the Opium Wars. The first of these conflicts (1839–1842) was ignited by the need of the British Empire to

counterbalance the trade deficit with China caused by the immense quantities of imports such as porcelain and, above all, tea, which had become extremely popular in England. The British found the answer in a crop that grew in many areas of the Raj: the poppy and its derivative opium. They started smuggling huge quantities of the drug into China, which resulted in an epidemic of drug addiction that undermined social structures in many areas. When a large delivery of opium was destroyed in the port of Canton, the British attacked, and with the 1842 treaty they forced China to open its ports to foreign commerce, to allow other countries to establish extra-territorial enclaves, and to surrender the island of Hong King to Great Britain.²⁸

At the same time the Raj, looking for other sources of supply, found that tea also grew in Assam. The British established plantations in the area, putting an end to the seminomadic way of life of the local inhabitants. They also introduced the crop to Ceylon, where many coffee growers were experiencing a major crisis and were looking to reconvert their estates to a lucrative crop. With tea, the British brought Tamil workers from Southern India, laying the foundations for the ethnic tensions that to this day haunt the island.²⁹ However, it was not until the third quarter of the century that the new plantations became profitable. The Dutch managed to produce tea in Java, dealing another blow to the Chinese monopoly.

The opening of China to Western powers brought with it a growing presence of foreign merchants, military, and diplomatic representatives, who had Chinese cooks learn how to cater to their tastes and habits. However, foreign cuisines had little influence on the local foodways, despite the opening of a few high-end restaurants and grand hotels in treaty ports, such as Shanghai. One of the exceptions was the establishment of beer breweries, starting from Qingdao in the Shandong region where the Germans had their bases. Christian missionaries tried to introduce Western food customs as a way to impose their civilization on the locals. In particular, they used meat eating as an attack on vegetarianism, often connected to Buddhism, to the point that conversions became known as “eating the foreign religion,” especially when the Qing establishment was trying to oppose any assimilation of foreign habits.³⁰ In fact, the imperial court, despite its foreign origins, maintained its elaborate cuisine based on Chinese traditions, as the records of the Imperial Banqueting Court (*Guanglu Si*) illustrate.

Even though the Chinese state modernized its infrastructure in terms of communication, transportation, and administration, trying to stimulate rural commercialization and long-distance, interregional marketing of crops, food production remained mainly traditional.³¹ The late Qing responded to the pressure on agricultural resources by organizing granaries, by spreading New World plants such as potatoes, sweet potatoes, maize, and tomatoes, and by introducing improvements and new techniques (although mostly labor-intensive ones) also through the publication of agricultural books and encyclopedias. However, the last few decades of the Qing dynasty were marked by frequent riots and rebellions, often motivated by crop failure and famines, among which the most devastating struck Northern China between 1876 and 1879, preceded by the shifting of the Yellow River in the 1850s.³²

JAPAN

After China, Japan became the object of interest for Western countries, too. In 1853 Commodore Perry appeared with war steamboats, forcing the country to open to foreign trade. Feeling that the Tokugawa shogun was not up to the new challenges, a group of nobles led what is known as the Meiji Restoration. In 1868, they gave the power back to the emperor. This period was marked by sweeping reforms in terms of infrastructure, bureaucracy, and agricultural modernization.³³ At the culinary level, foreign dishes and techniques were first used only during official and diplomatic occasions, but slowly percolated into the mainstream with the name of *yo-shuku*. Some restaurants adopted elements of the Anglo-American cuisine that was easier to replicate than the French techniques that were so popular worldwide, and required cheap and relatively new ingredients, such as carrots, onions, and tomatoes. Following the belief that Westerners were more powerful also because they ate better, the emperor made a point of letting the people know he ate beef.³⁴

The modernization project involved the army, which enforced a diet wherein recruits from all over the country, including rural areas, were exposed to beer, meat, soy sauce, and rice, which in a few decades came to be considered as a fundamental component of the Japanese meal, despite its limited use in the countryside where barley and other cereals were usually preferred over

it. The consumption of white polished rice, deprived of its vitamin-rich hull, caused an increase in beriberi among those who replaced brown rice and lesser cereals with it.³⁵ The government also introduced the concept of the family meal instead of meals consumed singularly by each family member, which created new duties for housewives, who were now in charge of modernizing private consumption in terms of convenience, hygiene, and originality.³⁶

The cooking style known as *kaiseki*—an expression of Zen-inspired *wabi*, developed as part of the tea ceremony and as an expression of restraint against the flamboyant, sixteenth-century, upper-class dining style—was adopted in commercial cooking in order to identify restaurants that offered traditional Japanese fare, known as *washoku*, to distinguish it from the Western-inflected *yoshoku* style. During the nineteenth century, in order to distinguish it from the commercial restaurant *kaiseki*, purists took to writing tea *kaiseki* with a set of characters that, despite the same pronunciation, meant “rock held to one’s bosom,” referring to the Zen monks’ habit of holding warm stones during meditation. Great chefs at the turn of the century also reinforced the aesthetic coordination of food and tableware, meal and surroundings, now perceived as one of the eternal traits of Japanese culture.³⁷

INDIA

Over time, the British Empire imposed its control over India, with heavy consequences on agriculture despite the development of local food industries.³⁸ Many artisans, ruined by the cheap goods produced in British factories, were forced to go back to the fields, increasing pressure on already depleted lands. Concurrently, no capital was reinvested in maintaining infrastructures, and landowners increased the amounts requested from the peasants in order to pay growing taxes. At times, the transition to commercial crops such as sugarcane was determined by the failure of irrigation projects that could not work for subsistence agriculture.³⁹ Impoverished farmers were transferred as indentured servants in the sugarcane plantations of the West Indies, Mauritius, and Natal, where manpower was needed after the abolition of slavery.⁴⁰

Despite the growing presence of foreigners, local cuisines continued to develop more or less independently. With the crisis of the Mughal, the

cities of Hyderabad and Lucknow, in the state of Oudh in Northern India, became important centers of culinary innovation and refinement, together with Delhi. In Lucknow, for example, chefs worked on classic Mughal recipes and gave them a local spin by highlighting the local, high-quality rice in *pilau* dishes (the grains were slowly cooked with broth, mint, and spices), adopting low-class dishes such as pancakes made of lentil or chickpea flour, or also adding fresh cream to meat dishes such as in the *quarama* or *korma* (chicken or lamb marinated in yogurt and then slowly braised).⁴¹

The influence of colonial cuisine on Indian foodways was limited by cultural and religious factors, including the Hindu and Muslim dietary rules as well as by the fear of pollution permeating Hindu culinary traditions. For their part, British colonists tried to stick to their customs, especially of tea and evening meals, which followed Victorian uses both in terms of structure and dishes, even when they were not so pleasurable in the new environment.⁴² The main meal of the day shifted from mid-day to the evening, when most formal gatherings and receptions took place and where large amounts of meat were consumed. In the South, the British adopted a light snack instead of lunch, which became known as *tiffin*. As for alcohol, Western drinks became more available: wine, champagne, beer, and brandy existed alongside local drinks such as *arrak*, distilled from the toddy brewed from palm-tree sap, and often mixed with ingredients such as spice, citrus juice, and sugar to make punch.⁴³

As the control of the Raj became more organized, an increasing number of women settled in the colony with their husbands. These women interacted with their local cooks, so that more British dishes appeared in daily meals and not only on formal occasions. However, hybrid dishes that called for rice, *dahl*, and chutney were not rare. Moreover, the British colonists tended to adopt elements from different local cuisines, integrating them in a gastronomic vocabulary that tended to be the same from north to south. Curries, at first indicating only spice relishes that accompanied rice, came to mean all sorts of liquid or stew-like concoctions based on spice mixes, often accompanying meats. Only later was the name used for a specific Anglo-Indian dish, which became so popular that the British, returning after their service in India, also made it well known at home. Over time, production of curry powders for domestic use such as Indian-inspired pickles, and chutneys that were initially developed to cater for Raj colonists and veterans, were soon embraced by the general population.

NOTES

Introduction

1. Meriwether 1887, 1.
2. Meriwether 1887, 8, 22, 60–61, 120, 143–45, 178, 180, 229, 252, 259–60; Meriwether 1911. With at least five editions between 1886 and 1889, *A Tramp Trip* was an editorial success, too.
3. For a brief survey, see Pierenkemper 1991.
4. *L'enquête (The inquiry)*, a send-up of the British Board of Trade inquiries on the cost of living, was published under the pseudonym of Pierre Hamp in 1913.
5. Meriwether 1889, 205–6.
6. On the question of quantity vs. quality of life in historical writing on the Industrial Revolution, see Engerman 1994.
7. Meriwether 1887, 21, 46.
8. Meriwether 1887, 174; Meriwether 1889, 139. On the paradoxical effects of material wealth on happiness, see Offer 2006.
9. Meriwether 1889, 31; Meriwether 1892, 40–42, 227–31; Meriwether 1887, 96–97, 103–4, 15, 105, 22–23, 196–97, 212, 134–35.
10. Desrosières [1993] 2010, 17–21, 94–99, 180–257; Teuteberg and Wiegmann [1972] 2005, 44–57; Sandgruber 1982, 132–33; Carré and Révauger 1995, 12–13; Cole 2000, 1–116.
11. Quetelet 1835, 1–28 (vol. 1), 52–56 (vol. 2); Engel 1887, 74; Engel 1895, 6.
12. Engel 1895, 26, 29, see also the original publication of 1857 republished in this volume; Le Play 1855.
13. Chai and Moneta 2010, 236–38.
14. Halbwachs 1912, 290–91, 400–423; Zimmerman 1932; Bruegel 2009, 14–5, 28–34; Veblen [1899] 1912, 22–34.

15. Meriwether 1889, vi; Engels [1845] 1972; Villermé 1840, vi (vol. 1); Mayhew 1861, 3. In general, see Carré and Révauger 1995, 7–20; Barret-Ducrocq 1995, 29–50; Burnett 1995, 149–61; Vernon 2007, 17–80.
16. Reinhardt, Spiekermann, and Thoms 1993; Aron 1967; Bruegel and Lauriou 2002; Hyman and Hyman 2001.
17. For convenient, programmatic statements on the ways of writing the history of everyday lives, see Farragher 1981, and Nipperdey 1973, and the ensuing works on historical anthropology and the history of everyday life. On scale in history, see Lepetit 1996, 89, 92. For an empirical study, Bruegel 2006.
18. Davin 1996, 182; Thuillier 1965, 1174; Prokopowitsch 1910, 78–79.
19. Le Play and Focillon 1857, 36; Focillon 1858, 156; Avalle 1858, 330; Gautier 1862, 291; Landolt 1893, 231–53; Meriwether 1892, 234; Dehne 1992; Lhuissier 2007. On used food markets, see Mayhew 1861, 105, 111, 133–34; Meriwether 1887, 23; Aron 1975.
20. Liebig 1842, xii; Prout 1827; Mani 1976.
21. Carpenter 1994, 40–76; Tanner 1999, 60–78; O'Hara-May 1971; Kamminga 1995.
22. Finlay 1995; Teuteberg 1990; *Food Journal*, Nov. 1, 1871, 450, and Sept. 2, 1872, 303.
23. Carpenter 1994; Nitti 1896, 31; see also Oswald 1879, 32–34.
24. Rabinbach 1986; Carpenter 1994, 77–99; Atwater 1888, especially 438.
25. Apple 1995b; Mokyr and Stein 1997; Laumonier 1896, 78–79; Atkinson 1896, 19.
26. Moleschott 1859, 540–42; Gautier and Chapusot 1872, 157–59; Depecker, forthcoming; Carpenter 1994, 100–118.
27. Atkinson 1896, 4; Hébert and Delbet 1857, 311; Bruegel 2001; Oddy 1970, 322; Dupuis 2002, 90–121.
28. Schlich 1995; “L'alimentation maigre” 1906, vi.
29. Héraud 1986; Selter 1995, 194–98; Emmins 2000, 709–10; “Kola, caféine et caféine théobromine” 1894, 507; Pendergast 2000, 7–68; Binder 2002; Franci 2002; Teuteberg 1976, 269–70; Sandgruber 1982, 192–205.
30. Toutain 1971; Harris et al. 2010, 8–21; Burnett 1989, 107–19, 158–91; Oddy 1990; Teuteberg 1976.
31. Scholliers 1986, especially 116; Kaplan 1996, 57–60; Oddy 1990, 256; Hobsbawm 1962, 1054; Haupt 2003, 31–32.
32. Grigg 1995; on famines, O'Gráda 2009.
33. Mokyr 1988; Komlos 1998; Cinnirella 2008; Meriwether 1887, 19.
34. Bruegel 2002a; Guillaumin 1904, 252, 28–29; Burnett 1989, 132–57.
35. Meriwether 1887, 261–62; Roberts 1977; Oddy 1990, 253; Davin 1996, 167–68; Young 1875, 713.
36. Ross 1993, 32–36; Davin 1996, 173–74; Haupt 2003, 104–5; Oddy 1990, 271–73; Moleschott 1859, 539.
37. Fogel 2004, 1–4.

38. Accum 1820. It is possible to see Accum as a something of a precursor of molecular gastronomy since he also authored a manual on “The scientific principles of cookery” (Accum 1821); Mercier 1782, vol. 1, 126–30, 219–24; vol. 2, 343–4; Taylor 1870, 95; on England in general, and Accum in particular, see the indispensable Burnett 1989, 86–103, 216–39; on Japan, Hanley 1997, 51–128, 176–98.
39. Meriwether 1892, 234; Walton 1992, 41–51.
40. Perren 2000, 1091–93; Thoms 1993, 25; Goudeau 1893, iv; Meriwether 1887, 92.
41. *Food Journal* 1873, 106.
42. Meriwether 1892, 24–26.

Chapter 1

1. Meriwether 1887, 261.
2. Saunier and Schaller 1995, 186–87. Data from French industrial survey 1860–1865, *Statistique de France* 1873.
3. Marion 1986, 213–14.
4. For further information on the growth strategies of food-processing companies, see Connor et al. 1985; Sutton 1991.
5. Vatin 1987.
6. Church 1999, 409.
7. *Recensement Général de la Population 1904 and 1908; U.S. Census of Manufactures Reports 1902 and 1907*.
8. See Saunier and Schaller 1995, 183–86 on how nutritional and intra-nutritional changes contributed to the development of the food industries.
9. Gourvish and Wilson 1994, 179.
10. Perren 2000, 1087–88.
11. *U.S. Census* 1905.
12. Perren 2000, 1064–65.
13. Vatin s.d., 46–57.
14. *U.S. Census Bulletin* 61 (1905), 9; *U.S. Census* 1905, cxxx.
15. *U.S. Census* 1905, cxxx.
16. *Statistik des Deutschen Reichs* N. F. 1907.
17. For further detail on these two slaughterhouses and, more generally speaking, on the four industries described here, see Saunier and Bruegel 2004.
18. *U.S. Census* 1890, U.S. Census Office 1895.
19. Chandler 1990, 3–13.
20. See Dessaux 2003; Meriwether 1892, 248–49.
21. Giedion [1948] 1969.
22. Perren 2000, 1090.
23. Burnett 1979, 142; Pétré-Grenouilleau 1997, 175.
24. 1914 data; prior to that, the *Census* put bread and other bakery products, and therefore very small establishments, into the same category as biscuit making.

25. Saunier and Schaller 1995, 187.
26. Parliamentary report of 1913 cited in Fichou 2004, 8.
27. Bruegel 1997.
28. See, among others, Helias 1975, 448, 462.
29. Burnett 1979, 131, 29; Saunier 1975.
30. Ellerbrock 1993, 349–54.
31. A series of tables at which teams of female employees overseen by a forewoman carried out the same task (weighing, packeting, labeling). For further detail, see Saunier and Bruegel 2004, 388–89.
32. Turgan 1885; Figuier 1873–1877; Savoie 1913; Sinclair 1906.
33. At least part of what Sinclair denounced is still true today.
34. These are orders of magnitude, particularly for the end of the nineteenth century when the dispersion of poultry prices was high.

Chapter 2

1. Fine and Leopold 1993.
2. Sarasua and Scholliers 2005.
3. Segers and Van Molle 2004, 24–25.
4. Vandenbroeke 1975, 113–14.
5. Meriwether 1887, 246.
6. Thoen and Vanhaute 1999, 279–90; Hudson 1996.
7. Blomme 1992, 31–36, 289–91; Bieleman 2008.
8. Meriwether 1887, 164.
9. Van Dijck 2008, 341–46.
10. Kopsidis 1996, 291–310.
11. Jacks 2005, 381–413.
12. Philips 1992, 53–86; Spiekermann 1999.
13. Segers et al. 2009, 13–14; Scholliers 2009, 19–25.
14. Nützenadel and Trentmann 2008a.
15. Segers and Van Molle 2004, 50–53.
16. Blomme 1992, 34–36, 291–92.
17. See chapter 1.
18. Perren 2006, 20–23.
19. Van Molle 1990, 108–12; Tracy 1982, 161–62.
20. Spiekermann 1999, 530–34; Keller 1998.
21. Jaumain 1997, 685–700.

Chapter 3

1. Accum 1820.
2. Accum 1822.
3. Hassall 1855; Burnett 1976, 122; Rappaport 2006, 128.

4. For example: Vogel 1873; Bresgen 1877; Bauer 1877; *National-Zeitung* 1877.
5. In the United States, the publication of Upton Sinclair's *The Jungle*, with its vivid description of the conditions of the meat-packing industry played a key role in provoking legislators to enact federal regulation of food; see Law 2004.
6. Schmauderer 1975, 11; Bourdieu et al. 2004.
7. Cf. Richter and Furubotn 2003, 174–85.
8. Mani 1976.
9. Ellerbrock 1993.
10. Bresgen 1877, 31; *Stenographische Berichte*, 3. Leg., 2. Sess., 1878, suppl. 3, no. 98, 801–30.
11. Burnett 1976, 117.
12. Act for preventing the Adulteration of Articles of Food or Drink 1860. 23 and 24 Vict., *Public General Acts* 1860, cap. 84.
13. *Proceedings of the Society of Public Analysts* 1876, 65.
14. Burnett 1976, 126–27.
15. Adulteration of Food and Drink and Drugs Act, 1872, *Public General Acts* 1872, chapter 74.
16. Burnett 1976, 128.
17. French and Phillips 2000, 126.
18. Clause 6, Sale of Foods and Drugs Act 1875, 38 and 39 Vict., *Public General Acts* 1875, chapter 63.
19. French and Phillips 1998, 356.
20. French and Phillips 2000, 26–27.
21. Sale of Food and Drugs Act, 1899, *Public General Acts* 1899, 51.
22. French and Phillips 1998, 351, 356.
23. French and Phillips 1998, 351; French and Phillips 2000, 46–7, 124–25.
24. French and Phillips 1998, 359.
25. *Stenographische Berichte*, 3. Leg., 2. Sess., 1878, vol. 1, 621–22, 631–32; *ibid.*, 3. Leg., 1. Sess., vol. 1, 1877, 149–50, 153; *ibid.*, 4. Leg., 2. Sess., 1879, vol. 1, 787, 794; *ibid.*, 4. Leg., 2. Sess., 1879, 792; Bericht der Kommission zur Aufstellung eines Normalstatuts für Überwachungsanstalten, Anlage A, *Bundesarchiv* Berlin, R 86/2106.
26. *Bundesarchiv* Berlin, R 86/2072.
27. *Stenographische Berichte*, 4. Leg., 2. Sess., 1879, vol. 1, 621–39, 796, 807; *ibid.*, 3. Leg., 2. Sess., 1878, vol. 1, 626–27, 637–38; *ibid.*, 3. Leg., 2. Sess., 1878, Suppl. 3, no. 98, 766–829; *ibid.*, 3. Leg., 2. Sess., 1878, suppl. 4, no. 206, 1348–82; *ibid.*, 4. Leg., 2. Sess., 1879, vol. 1, 128–34, 772–817; *ibid.*, 4. Leg., 2. Sess., 1879, vol. 2, 864–86; *ibid.*, 4. Leg., 2. Sess., 1879, suppl. 4, no. 7, 172–83; *ibid.*, 4. Leg., 2. Sess., 1879, suppl. 4, no. 59, 540–50.
28. Gesetz, betreffend den Verkehr mit Nahrungsmitteln, Genussmitteln und Gebrauchsgegenständen 1879, *Reichsgesetzblatt* 1879, 145.
29. Gesetz, betreffend den Verkehr mit Ersatzmitteln für Butter, 1887, *Reichsgesetzblatt* 1887, 375–76; Gesetz, betreffend den Verkehr mit Butter, Käse, Schmalz und deren Ersatzmitteln, 1897, *Reichsgesetzblatt* 1897, 475–80; Gesetz, betr.

- Verkehr mit Wein, weinhaltigen und weinähnlichen Getränken, 1892, *Reichsgesetzblatt* 1892, 597–600; Gesetz, betr. die Schlachtvieh- und Fleischbeschau, 1900, *Reichsgesetzblatt* 1900, 547–55; Gesetz, betr. den Verkehr mit Wein, weinhaltigen und weinähnlichen Getränken, 1901, *Reichsgesetzblatt* 1901, 175–81; Weingesetz, 1909, *Reichsgesetzblatt* 1909, 393–402.
30. Abel 1911.
 31. Abel 1907, 616–17; Neufeld, 1910, 18–19.
 32. Some examples: Denkschrift betr. das Gesetz über den Verkehr mit Nahrungs- und Genussmitteln vom 14. Mai 1879, Berlin, im Januar 1882, *Geheimes Staatsarchiv Preussischer Kulturbesitz*, 1. HA, Rep. 120 C IX 1, no. 3, vol. 3.2; Beschlüsse des Sonderausschusses des Deutschen Handelstages, *Geheimes Staatsarchiv Preussischer Kulturbesitz*, I. HA, Rep. 84 A, no. 2440.
 33. Zur Schaffung einer Reichs-Untersuchungsstelle: Die Schaffung eines Beirates der Reichsbehörde für Nahrungsmittelgesetzgebung. 1907; Die Eingabe des Bundes Deutscher Nahrungsmittel-Fabrikanten und -Händler vom 27. April 1908 betr. Bestehender Bedürfnisse der Gesetzgebung für den Verkehr mit Nahrungsmitteln, Genußmitteln und Gebrauchsgegenständen, 1909.
 34. *Statistik des Deutschen Reichs* 1882–1914.
 35. *Bundesarchiv Berlin*, R 86/2105.
 36. König 1879/80; Rupp 1900; Bujard and Baier 1911; Hassall 1857; Mitchell 1848.
 37. *Zeitschrift für die Untersuchung der Nahrungsmittel; Jahresberichte über die Fortschritte in der Untersuchung der Nahrungs- und Genussmittel; The Lancet; The Analyst*.
 38. Cf. Schwarz 2003, 230–33.
 39. Fiedler 2001, 589; Shapiro 1987, 635.
 40. König 1906, 8; Beythien 1911, 19.
 41. Cf. Sinn 2003, 288.
 42. French and Phillips 2000, 39; Oddy 2008, 94.
 43. *Vereinbarungen betreffs der Untersuchung und Beurteilung von Nahrungs- und Genussmitteln sowie Gebrauchsgegenständen*, 1885.
 44. *Vereinbarungen zur einheitlichen Untersuchung und Beurtheilung von Nahrungs- und Genußmitteln sowie Gebrauchsgegenständen für das Deutsche Reich*, 1897–1902.
 45. *Bundesarchiv Berlin*, R 86/858.
 46. French and Phillips 2000, 125–26.
 47. French and Phillips 2000, 64, 128.
 48. French and Phillips 2000, 137–38.
 49. French and Phillips 2000, 39–40, 43; Oddy 2007, 93–94.
 50. French and Phillips 2000, 129.
 51. French and Phillips 2000, 38–39; Hierholzer 2007b.
 52. Oddy 2007, 93–94.
 53. French and Phillips 2000, 55, 126; Oddy 2007, 96.

54. French and Phillips 2000, 35–36; Nahrungsmittelfälschungen, die Presse als Pranger, 1906; Zur Frage der Nahrungsmittelkontrolle, 1909.
55. Burnett 1976, 125–26; French and Phillips 2000, 47; Schlegel-Matthies 1987, 279–308.
56. Cf. Berghoff 2003, 62–63.
57. Haas 2003, 299.
58. French and Phillips 2000, 130; Horrocks 1994, 136–37; Teuteberg 2004, 141.
59. Fincke 1934, 19, 23; Rossfeld 2009, 30; Spiekermann 2009.
60. Horrocks 1994, 8, 130–32, 136–37, 140.
61. Conrad 2002, 11; French and Phillips 2000, 4.
62. Akerlof 1970, 488–500; Haas 2003, 295; Berghoff 2004b, 316–19; Wilkins 1994.
63. *Deutsches Nahrungsmittelbuch* 1905, 1909, 1925.
64. Kynast 1921, 50; Greiert 1926, 8–9, 12–13.
65. French and Phillips 2000, 133–34.
66. *Bundesarchiv Berlin*, R 86/5412 and R 86/5411.
67. Ambrosius 2005, 81
68. Prinz 1996, 33.
69. Theves 2004, 102–6. See also chapter 1.
70. For example: XIV. Internationaler Kongress für Hygiene und Demographie, 1907.
71. *Annales; British Food Journal*.
72. Internationaler Kongreß für Nahrungsmittelhygiene und zweckmäßige Ernährung des Menschen, 1905; I. Internationaler Kongreß für Nahrungsmittelhygiene und zweckmäßige Ernährung des Menschen, 1906; II. Internationaler Kongreß für Nahrungshygiene und rationelle Ernährung des Menschen in Brüssel, 1910.
73. *Commission* 1904; André 1907; *Commissione* 1907; Piutti 1907; Seventh International Congress of Applied Chemistry, London, May 27 to June 2, 1909, *Bundesarchiv Berlin* R 86/906.
74. Schreiben des Kaiserlichen Gesundheitsamts an den bayerischen Staatssekretär des Innern, Berlin, 22. Januar 1908, *Bayerisches Hauptstaatsarchiv*, MInn 62590.
75. Schreiben des Reichsamts des Innern an das bayerische Innenministerium, Berlin, 17. Februar 1909, *Bayerisches Hauptstaatsarchiv*, MInn 62590; Seventh International Congress of Applied Chemistry, London, May 27 to June 2, 1909, *Bundesarchiv Berlin* R 86/906.
76. I. Internationaler Kongreß zur Unterdrückung der Verfälschungen der Nahrungsmittel und pharmazeutischen Produkte, 1908; Erster Internationaler Kongreß zur Bekämpfung der Nahrungsmittelverfälschung und Kurpfuscherei, 1908; I. Internationaler Kongreß zur Unterdrückung der Verfälschung von Nahrungsmitteln und pharmazeutischen Produkte, 1908.
77. Berghoff 2004a, 148–49; Hickel 1973, 248–49.
78. *Vergleichende Darstellung* 1907, 533–54.
79. *Codex Alimentarius Austriacus* 1911–1917.

80. *Schweizerisches Lebensmittelbuch* 1909.
81. Pure Food and Drug Act 1906, *United States Statutes at Large*. 59th Cong., sess. I, chapter 3915, 768–72; Wescott 1913.

Chapter 4

1. Ihl 1998; on earlier happenings, see Von Ungern-Sternberg 2005.
2. The *Food Journal* (March 1, 1872), 58–59.
3. Engelsing 2010, 37–38; Meriwether 1887, 235.
4. Fischer 1982, 56–91; Vernon 2007, 17–40; Ó Gráda 2009, 25–39; one-third of the rural population was considered poor in the Swiss canton of Bern in the 1840s (Pfister 1990, 296), the same ratio as in Italy at the turn of the twentieth century (Roeck 2009, 108–21); on the literary treatment of hunger, see Häusler 1994.
5. The idea that political participation and efficient markets—in short: modernization—put an end to food riots in the mid-nineteenth century is in Tilly 1971.
6. Geary 1986.
7. All information from Vidalenc 1971. For the national context, Marjolin 1933.
8. Flonneau 1970; Hanson 1988.
9. Coftier and Dartiguenave 1999; on pre-revolutionary France, see Bouton 1993: esp. 258 (on “Hotbeds of food rioting”); Vidalenc 1971, 318–26.
10. Hanson 1988, 470–74.
11. Bourguinat 2008.
12. The literature on food riots is tremendous. An indispensable survey with an excellent introduction is Gailus and Volkmann 1994; and Randall and Charlesworth 2000.
13. Wong 1983; Lewis 1990, 65–69; Arnold 2000; Rogers 1987.
14. Pfister 1990, 283; Bohstedt 1992; Baumeister 1994; Gailus 1994; Bourguinat 2002; Roeck 2009, 108–21.
15. Orlove 1997; Lindenberger 1994.
16. Smith 1994.
17. Bonzon and Davis 1999.
18. Of course, the seminal article here is Thompson 1971.
19. Tilly 1971.
20. Bruegel 2002a, 168–70; Post 1977; Rogers 1987, 501–4; Gailus 1994, 181–87; Bohstedt 1994, 37–42; Baumeister 1994, 69–70.
21. Pfister 1990, 302; Lindenberger 1994, esp. 283.
22. Huhn 1987; Post 1977, 63–64; Gailus 1990, 304–27; Ó Gráda 2009, 133–34, 195–228.
23. Tilly et al. 1975, 275–76.
24. On Spain: Baumeister 1994; on China: Wong 1983.
25. Rogers 1987, 501, 503; Arnold 2000; Ó Gráda 2009, 205–6.

26. Filby 1934; Paulus 1974; Hutt and Hutt 1984; Grüne 1994; Scheuplein 1999; Ferrières 2002; Grandi 2007.
27. See, for example, Corbin 1986, 11–101.
28. Passy 1905, 397.
29. See, for example, Hietala 1994, 114–16, 119–21. In general, see chapter 3.
30. Atkins 1991; French and Phillips 2000, 11–65; Grüne 1994, 43–52. See also chapter 3.
31. My thanks go to Professor A. Stanziani, whose notes facilitated the writing of this section.
32. Regulation captured by interest groups: Stigler 1971. Adequate institutional frame and consumer protection: Glaeser and Shleifer 2003.
33. Lobbyists: Libecap 1992; Dupré 1992; Wood 1985. Consumer protection: Law 2003; Olmsted and Rhode 2004.
34. Wiebe 1967.
35. Barkan 1985.
36. Burnett 1989, 97–98, 226; König quoted in Grüne 1994, 34.
37. The most forceful proponent of this thesis is Reddy 1984, 1–21. But see Schmauderer 1976, 154–64; Grüne 1994, 24–42; Stanziani 2005, 39–56.
38. Accum 1820, 223–36, 246–60.
39. Schmauderer 1976, 164–70.
40. D’Avenel 1913, 165.
41. *Revue scientifique* 50 (July 6, 1912), 24.
42. Girard, De Brévans 1889. On regulation, Grüne 1994, 37–38, 86, 261–62; 331–36; Dupré 1999; French and Phillips 2000, 10–11, 25–26, 41–42, 45–50; DuPuis 2002, 110, 114, 117; Stanziani 2005, 175–89.
43. Ellerbrock 1987, 154, 172–83.
44. *L’alimentation publique*, Nov. 1882, 4.
45. Merki 1993; Munting and Szmrecsányi 2000.
46. Zylberman 2004; *Journal des connaissances utiles* 10 (Oct. 1832) quoted in Quin et al. 1965, 159.
47. Huck 1978; Gurney 1996; Prinz 1996; Scholliers 1999; Meusy 2001; and especially Kassim 2001.
48. *Bulletin de la Société scientifique d’hygiène alimentaire* 2 (1912), 191–92. On consumers’ leagues, see Pouillard 2004, 262–76; Chessel 2003, 95–108; Spiekermann 2006, 106; on boycotts in the United States, Glickman 2009, 1–188. The view from the 1930s is in *Courrier de la normalisation* (août-oct. 1932), 3.

Chapter 5

Sincere thanks to Frank Winter for correcting the English.

1. Burnett 2004, xii.
2. Scholliers 1996, 245–50.

3. Tanner 1998, 196.
4. Bruegel 2004, 184.
5. Van Esterik 2008, 81; Lovera 2005, 128–29; Heine 2004, 119, 121.
6. Atkins 2007, 32.
7. Bruegel 2004, 189.
8. Grossman and Ehrman 1999, 84–85.
9. Atkins 2007, 33.
10. Zeldin 1977, 741–42; Aron [1973] 1989, 290–93; Lhuissier 2007, 74–82.
11. The average hourly wage of a Parisian construction worker in 1850 was 0.41 francs (*Annuaire statistique de la France* [1910], vol. 30, 104).
12. Meriwether 1887, 252.
13. den Hartog 2003; Williot 2007, 221 ff.
14. Burnett 2004, 107–8; Grossman and Ehrman 1999, 92; Shore 2007, 321–22.
15. Burnett 2004, 121–24; Shaw 2006, 87.
16. Levenstein 2004, 188.
17. Freeland 2009, 171–74.
18. Heinzelman 2008, 126.
19. de la Bruhèze and van Otterloo 2003, 320.
20. Heine 2004, 119, 121–22, 125.
21. Guggenbühl 2003, 96–102; Lhuissier 2007, 70–71; Newman 2004, 130.
22. Taylor Sen 2004, 126.
23. Grossman and Ehrman 1999, 74–75.
24. Burnett 2004, 41, 110–11.
25. Tanner 1998, 190.
26. Thoms 2003; Bruegel 2004, 190; Lhuissier 2007, 97–105.
27. Nourrisson 2004.
28. Gerbod 2000, 100–103.
29. Shore 2007, 320.
30. Gerbod 2000, 70–71.
31. Gerbod 2000, 72–73; Shore 2007, 319–20.
32. Norway-Heritage, 2009.
33. Gerbod 2000, 74–75.
34. Aron [1973] 1989, 7, 18–19; Mennell [1985] 1996, 139–41; Symons 2000, 289–90, 318; Trubek 2000, 37; Poulain and Neirinck [1988] 2004, 60–61.
35. Kümin 2003, 71, 79; Spang 2000, 2–3.
36. Spang 2000, 2, 75–83; Trubek 2000, 37.
37. Spang 2000, 68–69; Trubek 2000, 36.
38. Mennell [1988] 1996, 155; Burnett 2004, 84–86.
39. Symons 2000, 304–6; Newman 2004, 130, 138; Van Esterik 2008, 86.
40. E.g., Teuteberg 2003, 282–83.
41. Poulain and Neirinck [1988] 2004, 61, 78, 79, 83, 84.
42. Trubek 2000, 139–42; Gerbod 2000, 78–79; Drouard 2007, 274.
43. Watkin 1984; Drummer 1997, 314–15; Shore 2007, 323–36.

44. Notaker 2009.
45. E.g., Charles Ranhofer's *The Epicurian* (New York 1894), chef of New York's Delmonico's, or Mariano Galván Rivera's *El Cocinero Mexicano* (Mexico 1831).
46. Poulain and Neirinck [1988] 2004, 63–66; Mennell [1985] 1996, 267–68; Spang 2000, 152–63; Parkhust Ferguson 2004, 95–96.
47. Zeldin 1977, 745–47; Mennell [1985] 1996, 269; Shore 2007, 312.
48. Mennell [1985] 1996, 169–77; Trubek 2000, 83–86.
49. Zeldin 1977, 743–44; Drouard 2004, 68–71.
50. Mennell [1985] 1996, 139.
51. Aron [1973] 1989, 115–17; Spang 2000, 177.
52. Aron [1973] 1989, 191.
53. Grossman and Ehrman 1999, 79; Shore 2007, 327.

Chapter 6

1. Flandrin and Montanari 1996; Jacobs and Scholliers 2003.
2. Jacob and Scholliers 2003, 1.
3. Lhuissier 2003, 341.
4. Turner 2009, 229.
5. Pilcher 2000, 127.
6. Bruegel 2011.
7. Flandrin and Montanari 1999, 2.
8. Pedrocco 1999, 483. See also chapter 1.
9. Turner 2009, 229.
10. Burnett 2003, 21; Meriwether 1887, 138.
11. Burnett 2003, 25.
12. Turner 2009, 231.
13. Trubek 2000, 125.
14. Meriwether 1887, 64.
15. Beecher 1873, 16.
16. Beecher 1873, 130.
17. Light 2008, 33.
18. Light 2008, xvii.
19. Collingham 2006, 113.
20. Pitte 1999, 473.
21. Drouard 2003, 216.
22. Brown 1997, 9.
23. Brown 1997, 155.
24. Mackenzie 1953, 53–55.
25. Mackenzie 1953, 53–55.
26. Hsu and Hsu 1977, 306.

27. Hines, Marshall, and Weaver 1987, 74.
28. Turgan 1882.
29. Claflin 2008, 34, 36. See also chapter 1.
30. Trubek 2000, 47.
31. Trubek 2000, 35.
32. Mennell [1985] 1996, 172; Trubek 2000, 104–7 (in France, culinary schools appeared in the 1890s, having very little success).
33. Trubek 2000, 72–76; Drouard 2004, 37–46; Scholliers 2004, 138–40.
34. Scholliers 2004 (supplying the example of active coming-and-going of restaurant staff in Brussels between 1840 and 1910).
35. Drummer 1997; Gerbod 2000, 86–93; Trubek 2000, 37, 47, 74; Taylor Sen 2004; Shore 2007, 309–11, 322–23, 329, 127.
36. Shore 2007, 322.
37. Smith 2006, 748, 761–62.
38. Trubek 2000, 103.
39. Williot 2007, 220–26.
40. Orwell 1961, 57.
41. Orwell 1961, 64–65.
42. Escoffier 1997, 120.
43. Tschumi 1974, 195.
44. Wheaton 1983; Parkhurst Ferguson 2004.
45. Trubek 2000, 85.

Chapter 7

1. Pioneer work by John Drummond and Anne Wilbraham (*The Englishman's Food. A History of Five Centuries of English Diet*, 1957) was ably developed by John Burnett (*Plenty and Want: a Social History of Diet in England from 1815 to the present Day*, (1966) 1979), Derek Oddy ('Working-class Diet in late nineteenth-century Britain', *Economic History Review* 23: 2, Aug. 1970) and others. Cf. Derek Oddy and Derek Miller (eds), *the Making of the British Diet*, 1976.
2. 'It was calculated in 1885 that whereas the working class spent 71% of their earnings on food and drink, the middle classes only spent 44%': Burnett, *Plenty and Want*, p. 126, quoting Leone Levi.
3. Burnett, *Plenty and Want*, pp. 132–3.
4. Burnett, *Plenty and Want*, p. 126.
5. Benjamin Seeböhm Rowntree, *Poverty: a Study of Town Life*, 1901.
6. Standish Meacham, *A Life Apart*, pp. 87–8.
7. Dorothy Tennant, 'The London Ragamuffin', *English Illustrated Magazine* 2, June 1885, p. 610.
8. Alexander Paterson, *Across the Bridges*, 1911, p. 23.

9. On jam, see *Plenty and Want*, p. 143, and Paterson, *Bridges*, p. 36. Cheaper sugar encouraged consumption (24 lb per head per year in 1849, 47.2 in 1870, 87.1 in 1900), much of it in jams, jellies and sweets: James Jefferys, *Retail Trading in Britain, 1850–1950*, 1954, pp. 8, 128, 253–7; Burnett, *Plenty and Want*, p. 132.
10. In the 1870s and 1880s butterine, which combined beef fat and vegetable oil, was being imported in large quantities. By 1889 London had margarine factories in Bermondsey, Greenwich, Lambeth, Whitechapel and the City (*Return of Margarine Factories*, PP 1889). From the 1890s the beef fat was omitted and its nutritional value declined: Burnett, *Plenty and Want*, p. 142.
11. See Grace Foakes, *Between High Walls: a London Childhood*, 1972, p. 9.
12. Reeves, *Pound a Week*, p. 37. The price of wheat was halved between 1873 and 1893, because of cheap imported grain, so bread, the traditional staple, was especially cheap. But its nutritional value was also declining, because new milling techniques eliminated the wheatgerm: Burnett, *Plenty and Want*, pp. 132–4, 140; and his *A History of the Cost of Living*, 1969, pp. 204–5. See also National Food Economy League, *How to Save Money*, (no date), p. 7: ‘The very white baker’s loaf is absolutely unfit to be given to children whose principal food is bread... The result is pale thin children of poor growth, and with wretchedly bad teeth’.
13. Paterson, *Bridges*, p. 35. Tea consumption was rising, though poor people made the leaves go further by re-using them: Laski, ‘Domestic Life’, p. 172. Nationally it quadrupled in the second half of the nineteenth century, because of reduced taxes, new sources of supply, and the rise of firms (like Lipton’s) which aimed at a mass market. See Burnett, *Plenty and Want*, p. 131; Burnett, *Cost of Living*, p. 213; A. R. Waugh, *The Lipton Story*, 1954, pp. 52–9.
14. Cf. White, *Rothschild Buildings*, p. 110; Mrs B. (born Poplar, 1882), recorded Davin 1973, transcript p. A4. In Hackney fresh goat milk could be bought from Mrs Nelson (who also swept chimneys): Mr Smith of Clapton and Albert Cullington, Hackney People’s Autobiography meeting, 14 Nov. 1973.
15. On milk, see series on the milk supply of large towns in *BMJ* 1903; George F. McCleary, *Infantile Mortality and Infant Milk Depots*, 1905; F. J. H. Coutts, *Condensed Milks*, (Reports to Local Government Board on Public Health, New Series 56, 1911). Weekly consumption per head in 1902 was estimated to be 0.8 pints in labourers’ families; 1.8 among artisans; 3.8 in the lower middle class; and 6 in the middle-class families: Burnett, *Plenty and Want*, p. 201, citing Ruth L. Cohen, *History of Milk Prices*, 1936.
16. Bibby, *Pudding Lady*, pp. 90, 96.
17. Reeves, *Pound a Week*, p. 59.
18. Burnett, *Plenty and Want*, pp. 131–5; John K. Walton, *Fish and Chips and the British Working Class, 1870–1940*, Leicester, 1993.
19. Drummond and Wilbraham, *The Englishman’s Food*, pp. 377–86. The national increase was from 110 lb per head in 1874 to 130 lb in 1896. See also Burnett, *Plenty and Want*, chap. 8.

20. Laski, 'Domestic Life', p. 171.
21. Albert Stanley Jasper, *A Hoxton Childhood*, (1969) 1974, p. 48.
22. Reeves, *Pound a Week*, p. 59.
23. Gas stoves in 1902 cost £5 to buy or 2s 6d a quarter to rent: White, *Rothschild Buildings*, p. 46; and gas cost from 2s 10d to 6s a cubic foot: p. 160. In a poor Hackney neighbourhood, 'not half the girls' in the cookery class had gas stoves at home: Logbook (HMI report) Maidstone Street, 21 July 1902.
24. Thea Thompson, *Edwardian Childhoods*, 1980, pp. 15–16.
25. The Paddington Medical Officer of Health attributed 'difficulty in dealing with household refuse' to the increasing use of gas stoves in flats: *Medical Officer of Health for London, Report 1900*, p. 52.
26. Alice Lewis (born Chelsea, 1898), ms. memoir, p. 7. Cf. Arthur Harding's enthusiasm for his mother's sheep's-head stews: Samuel, *Underworld*, p. 28; the East-end mother's stew with dumplings in Elizabeth Flint, *Hot Bread and Chips*, 1963, p. 20; and the appetizing descriptions of Jewish mothers' cooking, White, *Buildings*, pp. 153–5.
27. Mr N. (born 1899), Essex 417, transcript p. 9. He also used to go to Leadenhall Market for 3d worth of giblets ('once a week that was our kickup, good old giblet stew'): p. 15. Mrs Kaplan's occasional jobs, when she brought home left-over chicken, milk and cakes, were 'the only time we sort of got a bit comfortable': White, *Buildings*, p. 162.
28. Edith H. (born Paddington, 1894), Essex 53, transcript pp. 6, 10.
29. Suet puddings were constantly promoted in cooking lessons provided by the St Pancras School for Mothers: see Bibby, *Pudding Lady*, pp. 39, 45, 61.
30. See comments by Sykes (medical officer of health), and Osborne, Child, and Auger, (food inspectors), in Bibby, *Pudding Lady*, pp. 13–19.
31. Charles Chaplin, *My Autobiography*, (1964) 1966, p. 50.
32. Bibby, *Pudding Lady*, p. 52.
33. Margaret Cohen, and Marion and Hymie Fagan (eds), *Childhood Memories: recorded by some Socialist men and women in their later years*, 1984, p. 38.
34. Cf. White, *Buildings*, p. 80.
35. Charles Edward Shed (born Hoxton, 1890), Geoff Richman, *Fly a Flag for Poplar*, [c. 1975], p. 28. His mother had learnt cooking at the Jewish Free School. He spoke of growing up amongst Jews and knowing all about them, but attended church and did not see himself as Jewish (and knew all his grandparents). The family were all musicians, and at ease across cultures: they sang and played for Jewish weddings, for wakes, at parties and in pubs; his mother 'used to play a lot of Irish songs and yet she wasn't Irish' (p. 27).
36. Mr N. (born Stepney, 1899), Essex 417, transcript, p. 56. She ate them with butter and cheese; and when she introduced her friends to them they all wanted packets too.
37. Arthur Newton, *Years of Change: Autobiography of a Hackney Shoemaker*, 1974, p. 10.

38. Marie W. (born Hoxton, 1904), ms memoir, pp. 18–24.
39. P. F. William Ryan, ‘Scenes from Shop and Store London’, in G. R. Sims (ed.), *Living London*, 1902–3, vol. 3, p. 145.
40. Ryan, ‘Scenes from Shop and Store London’. Florence S. (born Deptford, 1904) remembered how ‘word used to get around amongst us children’ when the greengrocers had ‘got some specks in’: LSVA, transcript p. 3.
41. Bessie C. (born Bermondsey, 1893), Essex 261, transcript p. 47.
42. Mrs A. (born Waterloo, 1903), recorded Davin 1978, transcript p. 7. Tommy Morgan (born 1892) also went to Jermyn St for giblets (from Waterloo and Blackfriars), to the Strand for stale bread, and to Harts Corner (Smithfield) for ‘twopennorth of block ornaments’—five or six pounds of good meat, cheap because ‘having no fridges it was either sell it or give it away or throw it away, you see’: Thea Thompson, *Edwardian Childhoods*, p. 16.
43. Mrs A. (as previous note), p. 13; see also Tottenham History Workshop, *How Things Were: Growing up in Tottenham, 1890–1920*, [1981], p. 19, for a ‘whole big dinner’ made from bacon bones, ‘because then, they didn’t scrape the bones like they do now’; and Florence S. (born Deptford, 1904), whose mother sent her for free bacon bones to flavour pease pudding: LSVA, transcript p. 1.
44. Samuel, *Underworld*, p. 29.
45. LCC *Public Control Committee, Report on Markets*, 1893, p. 23; cf. comments on the low prices and good quality of food in East End markets: *ChambersJournal*, 15 March 1879, quoted in *East London History Society Bulletin*, June 1973, p. 6. Costermongers were under pressure (and therefore observation) in the 1890s and 1900s, because of heavier traffic in main streets; increasing municipal control of street activities; and the hostility of shopkeepers.
46. LCC *Public Control Committee, Report on Markets*, 1893, p. 25.
47. See for example Thomas Wright (writing as ‘A Journeyman Engineer’), ‘Saturday Trading’ in *The Great Unwashed*, [1868] 1970; George Gissing, *Thyrza, a Tale*, 1887, p. 38; Alice Lewis (born Chelsea, 1898) ms. autobiography, p. 8. For a child’s view of a Saturday night market: Ethel Mannin (born 1900), *Confessions and Impressions*, (1930) 1936, pp. 19–20. Also Booth, *Poverty* 1, pp. 66–8, on Brick Lane and Petticoat Lane.
48. LCC *Public Control Committee, Report*, 1901, p. 2.
49. Ellen Ross, ‘Fierce Questions and Taunts’: *Married Life in Working-Class London, 1870–1914*, *Feminist Studies* 8:2, fall 1982, p. 583.
50. Charles Booth mentions a backyard greenhouse in ‘a poor rough street’, where a labourer grew cucumbers and flowers for sale: *Poverty* 1, p. 14, and cf. p. 31: ‘from the railway may be seen small rough-roofed erections, interspersed with little glass houses’. For a description of the impressive suburban garden of an artisan, see Frederick Willis, *101 Jubilee Road: a Book of London Yesterdays*, 1948, p. 101.
51. Charles Dickens remarked with amazement on how fowls in poor neighbourhoods would ‘hop contentedly down a ladder into a cellar’, and ‘make

- roosting-places of shop-boards, barrows, oyster-tubs, bilkheads and door-strappers': The Uncommercial Traveller, 'Shy Neighbourhoods', *All the Year Round* 3:57, 26 May 1860.
52. At the Sunday market in Sclater Street, Bethnal Green (also known as Bird Fair), hawkers offered not only dogs and caged birds, but also 'rabbits, fowls, pigeons, geese, parrots, ducks...[and] goats': LCC Public Control Department, *Special Report on Markets*, 1893. Appendix B, p. 55. (There were twenty-one goats on sale on 20 Nov. 1892.)
 53. Margaret Llewelyn Davies (ed.), *Life as We Have Known It, by Co-operative Working Women*, (1931), 1977, p. 2; A. L. Hodson, *Letters from a Settlement*, 1909, p. 40. Cf. Economic Club [Edith S. Collet and Miss Robertson], *Family Budgets: being the Income and Expenses of 28 British Households, 1891-1894*, 1896, p.23 (East London household in 1892 with a pair of backyard bantams); John T. (born Bow, 1879), Essex 124, transcript p. 10 (rabbits and pigeons); Frank S. (born Battersea, 1884), Essex 225, transcript pp. 13-14 (rabbits and pigeons); Miss N. (born Shadwell, 1895), Essex 331, transcript p. 7 (rabbits—but mother wouldn't eat them); Alice Lewis (born Chelsea, 1898), ms. autobiography pp. 7, 9, 23 (rabbits, ducks, chickens); Jack W. (born 1903, Hoxton), ms. autobiography, pp. 20, 25; Eileen Baillie, *The Shabby Paradise: the Autobiography of a Decade*, 1959, p. 23 (Poplar); Leslie Piper (born 1908), in Peckham People's History, *The Times of Our Lives: Growing up in the Southwark area, 1900-1945*, 1983, p. 11.
 54. A Fancy Rabbit was one of the prizes at 'a Grand Concert and Draw' on behalf of Walter Southgate's grandfather, in Bethnal Green in 1886: Southgate, *That's the Way*, p. 60.
 55. Walter Southgate, 'Looking Back', *Profile*, July 1969.
 56. White, *Buildings*, p. 39.
 57. Albert Stanley Jasper, *A Hoxton Childhood*, (1969), 1974, p. 20.
 58. Edward Ezard (born 1900), *Battersea Boy*, 1978, p. 28.
 59. *Royal Commission on the Housing of the Working Classes*, PP 1884-5 xxx (4402-1), evidence James Jordan, q. 1,472-3. Cf. Southgate's 1890s Irish neighbour, whose fowls roosted in the kitchen and roamed the street for neighbours' scraps: *That's the Way*, p. 35.
 60. Reeves, *Pound a Week*, p. 144.
 61. When Mrs H., 'a tidy respectable young woman with a husband in regular work, though with small wages', found that her growing children ate all the dinner, she recalled ruefully that 'we children never expected mother to have dinner. She always took a bit of bread. Now it has come to my turn I don't like it': Anna Martin, 'The Mother and Social Reform', *The Nineteenth Century and After* 73, May and June 1913, p. 1,069. Cf. Burnett, *Plenty and Want*, p. 185; Laura Oren, 'The Welfare of Women in Labouring Families: England, 1860-1950', in Mary Hartman and Lois Banner (eds), *Clio's Consciousness Raised*, 1974, esp. p. 229; George F. McCleary, *Infantile Mortality and*

- Infant Milk Depots*, 1905, p. 114 (on a diet of bread and tea nursing mothers soon lost their milk).
62. Alice Lewis (born Chelsea, 1898), ms. memoir p. 8. Priority went to the main male wage-earner, so in some cases it was given to a son. Cf. Paterson, *Bridges*, p. 22: an employed son 'will, without comment, expect and receive two kip-pers for his tea, while his unemployed father will make the most of bread and butter'.
 63. *Medical Officer of Health, London, Report* 1908, p. 16 (MO Education). He probably exaggerated the lack of vegetables; though according to Marghanita Laski, too ('Domestic Life', p. 182): 'so few vegetables and such small amounts of fruit were eaten that neither appears in the 1904 cost-of-living index'. The importance of vegetable stalls (see above), and the frequency with which pot-herbs (carrots and onions for stew or soup) and greens figure in both oral and written material, throw doubt on such statements. But salads, except water-cress, were scarce.
 64. See for example Frank S. (born Hoxton, 1884), who used to get the 'ears' from his father's haddock, Essex 225, transcript pp. 13–14.
 65. M. Loane, *An Englishman's Castle*, 1909, p. 134; and see George Newman, 'A Note on the London Death Rate for 1904', *Practitioner*, 1905, p. 112 (poverty led to 'lack of food, not rapid starvation, but slow starvation, especially of women, girls and children'); Ellen Ross, 'Fierce Questions and Taunts': Married Life in Working-Class London, 1870–1914', *Feminist Studies* 8:2, fall 1982, pp. 585–7; Standish Meacham, *A Life Apart: the English Work-ing Class, 1890–1914*, 1977, pp. 81–2. Derek Oddy argues ('Working-class Diet in late nineteenth-century Britain', *Economic History Review* 23:2, Aug. 1970, pp. 320–1) that 30s a week was the minimum needed to feed a family properly: below that women lived on bread and tea while 'almost all men consumed a main meal of meat or bacon or fish and potatoes'. Girls were per-haps serving their apprenticeship in 'maternal altruism': cf. Whitehead, 'I'm Hungry, Mum': the Politics of Domestic Budgeting', in Kate Young, Carol Wolkowitz and Roslyn McCullagh (eds), *Of Marriage and the Market*, 1981.
 66. The father of Bessie C. (born Bermondsey, 1893) shared food equally, with no favouring of any of the children: Essex 261, transcript p. 13. Reeves observed that a child of slow mental or physical development 'often is the father's pet, for whom he will sacrifice both food and sleep': *Pound a Week*, p. 158.
 67. Cf. 'One of the Crowd', *Toilers in London*, 1887 (articles reprinted from *Daily Telegraph*), p. 86, for the diminishing contents of working boy's daily packed lunch: by Thursday only dry bread. In 1905 the subsidized dinners being ex-perimentally provided were least popular on Mondays: see PRO file ED 14/93, Preliminary Report on School Dinner Experiment. The same point is made in a later appendix, 6 Nov. 1909.
 68. *Toynbee Record*, Feb. 1905, p. 67. Cf. diet of a poor family near Loughbor-ough Junction in 1891 (Economic Club, *Family Budgets*, 1896, p. 20): mainly

- tea, bread and margarine, with meat and vegetables, or fish, two or three times a week, and if possible suet pudding on Sunday.
69. Allan Jobson, *The Creeping Hours of Time: an Autobiography*, 1977, p. 53.
 70. Frederick Willis, *Peace and Dripping Toast*, 1950, p. 147.
 71. Quoted (from letter to author) in Bob Gilding, *Journeyman Coopers*, Oxford, 1971, p. 21. Gilding describes other such cooking, from his own coopering days in the 1940s and '50s, and from Booth, *2nd series*, 1, p. 258.
 72. Southgate, *That's the Way*, p. 29. (Burgoo sounds remarkably like burghul, or cracked wheat.)
 73. Thomas Wright (writing as 'A Journeyman Engineer'), *Some Habits and Customs of the Working Classes*, 1867, p. 209.
 74. See for examples: Thomas Wright (writing as 'A Journeyman Engineer'), 'Tramps and Tramping', *The Great Unwashed*, [1868] 1970, p. 266; 'Thor Fredur', 'Tramps and Tramp Kitchens', *Sketches from Shady Places*, 1879, p. 84; Booth, *Poverty* 1, p. 209 (Valpy on lodging houses); T. W. Wilkinson, 'Dossier'-Land in London', in G. R. Sims (ed.), *Living London*, 1902–3, vol. 2, pp. 152–3; George Acorn, *One of the Multitude*, 1911, pp. 125–6.
 75. Mrs W. (born Finsbury, 1896) recalled that her father, a piano mover, would go to Smithfield market on Saturday for an aitchbone of beef, then cut part off for Saturday's meal; but her mother did the actual cooking: Essex 342, transcript p. 4. Clementina Black (*Married Women's Work*, ed., 1915, p. 90) records a husband who combined work as a scene shifter with cooking and looking after the house, while his wife worked as a waistcoat maker; and (p. 23) a consumptive husband who cooked the midday meals for five children.
 76. Charles M. (born Islington, 1870), Essex 346, transcript pp. 9, 12.
 77. Southgate, *That's the Way*, p. 25.
 78. Wiliam Nn., ms. autobiography, p. 59.
 79. George Acorn, *One of the Multitude*, 1911, pp. 110–14.
 80. Mr Shed (born Hoxton, 1890), Geoff Richman, *Fly a Flag for Poplar*, [c. 1975], p. 28.
 81. Charles C. (born Bromley by Bow, 1891), used to 'cadge a ha'penny off the old lady' (his mother) and run round to the fish shop for a bag of cracklings—crunchy fragments of batter scooped out of the oil after the fish were fried—'big bag for a ha'penny, and a lump of bread': recorded Raphael Samuel, c. 1974, transcript side 1, pp. 10–11. Cf. Samuel, *Underworld*, p. 27: Arthur Harding tried his aunt for a copper when hungry, or stood outside the shop asking customers for money or 'a tater'.
 82. Bibby, *Pudding Lady*, p. 37.
 83. Anna Wickham (born Camden Town, 1883) recalled her mother's stories of pineapple as a treat during a penurious childhood: R. D. Smith (ed.), *The Writings of Anna Wickham, Free Woman and Poet*, 1984, p. 68. Children who lived within reach of heath or open country also had access to berries and wild

- fruits, and even, if daring, to those in orchards and market gardens. Minnie Cowley had happy memories of forays from Twickenham into the country when ‘we ate like lords...squashed ripe blackberries on the bread, apples and agars (berries of the hawthorn tree)’: ms. autobiography, p. 62.
84. Local Government Board, *Report on Poor Law Schools*, 1873–4, p. 325. Forty years later Dr Eric Pritchard observed of East End children in convalescent homes that they ‘did not care for’ the unfamiliar plain food, ‘they did not take it with any zest whatever’: Charles E. Hecht (ed.), *Our Children’s Health at Home and at School: Proceedings of the National Food Reform Association Conference on Diet and Hygiene in Public, Secondary and Private Schools*, 1912, p. 52.
 85. *Cross Commission*, 2nd Report, PP 1887 xxix (5056), evidence of Mrs Burgwin (Orange St School), q. 17,092.
 86. Dorothy Tennant, ‘The London Ragamuffin’, *English Illustrated Magazine* 2, June 1885, pp. 603–4. Cf. Albert Smith’s list of a street boy’s food choices, Henry Mayhew, *London Labour and the London Poor*, four vols, 1861–2, vol. 1, p. 159.
 87. John Bellamy (born Hoxton, 1884), ‘Looking Back’, *Profile*, March 1969, p. 3.
 88. Burnett, *Plenty and Want*, p. 135; E. J. Hobsbawm, ‘The Making of the Working Class, 1870–1914’, [1979] in Hobsbawm (ed.), *Worlds of Labour*, 1984, pp. 200–1; John K. Walton, *Fish and Chips and the British Working Class, 1870–1940*, Leicester University Press, 1993.
 89. Paterson, *Bridges*, p. 36.
 90. *Interdepartmental Committee on Physical Deterioration*, PP 1904 xxxii (2186), evidence of Dr Eicholz, q. 437. But a writer in Bibby, *Pudding Lady* (p. 14) considered the ready-cooked food of ‘the poorest class of people’ (‘fried fish and potatoes, canned goods, brawns...; jellied eels, trotters, tripe...’) as ‘wholesome and well cooked’.
 91. *Reports on Children under Five in Public Elementary Schools by the Women Inspectors of the Board of Education*, PP 1906 xc (2726), p. 5 (Miss Munday’s report).
 92. Perhaps vinegar, for which cravings were also sometimes reported, was implicated here.
 93. *Medical Officer of Health, London, Report*, 1900, Appendix 1, pp. 3–14. (Numbers taking their purchase home or eating it at once are estimated from the block graph facing p. 13.)
 94. Kathleen Heasman, *Evangelicals in Action: an appraisal of their social work in the Victorian Era*, 1962, p. 75.
 95. *Cross Commission, Second Report*, evidence qq. 17,168–76, PP 1887 xxix (5056); Thomas Gautrey, *Lux Mihi Laus: School Board Memories*, 1937, p. 92.

96. Cf. also London School Dinners Fund (1889), East Lambeth Teachers' Association's Scholars' Free Meal Fund (1892). See Hugh B. Philpott, *London at School: the Story of the School Board, 1870–1904*, 1904, Mildred Emily Bulkley, *The Feeding of School Children*, 1914; Richard Selleck, *The New Education: the English Background, 1870–1914*, 1968, pp. 159–65; John S. Hurt, *Elementary Schooling and the Working Classes, 1860–1918*, 1979, pp. 101–27; David Rubinstein, *School Attendance in London, 1870–1914: a Social History*, Hull, 1969, pp. 81–3; and for local experience, Tottenham History Workshop, *How Things Were: Growing up in Tottenham, 1890–1920*, [1981], pp. 41–43. Cf. also White, (*Buildings*, pp. 170–1) for free bread and milk at two East End Jewish schools; and for sandwiches brought to the children at break.
97. George Robert Sims, *How the Poor Live*, 1883, p. 23. For use of free food as a bait to draw children into school, see Samuel, *Underworld*, pp. 25–6.
98. The wholesale supply of free school dinners was opposed by the Charity Organization Society, who wanted individual cases to be vetted: Judith Fido, 'The Charity Organization Society', Donagrodzki (ed.), *Social Control in 19th century Britain*, 1977, p. 214.
99. For general account, see William Robertson, 'The Overpressure Controversy', *Journal of the History of Education*. For Crichton Browne on migratory habits among the poor (reported), see William Chance (ed.), *Report of the Proceedings of the Third International Congress for the Welfare and Protection of Children*, 1902, p. 20.
100. Board of Education, *Report of Dr Crichton Browne upon Alleged Overpressure of Work in the Public Elementary Schools*, Memorandum, PP 1884 lxi (293), p. 10.
101. *Overpressure*, PP 1884, p. 77. The argument recurs: see for instance *Times*, 8 Feb. 1906, letter from Arthur Clay.
102. School Board of London, *Minutes*, 6 March 1884, p. 680. An amendment proposing instead that hungry children be given employment for part of the day by which they could earn a meal was lost 20 to 14.
103. SBL *Subcommittee... Administration of Byelaws*, *Minutes*, 1891.
104. SBL *Subcommittee... Meals*, *Minutes*, 1889, p. 48. Expenditure on this enquiry was later challenged by the auditors: see PRO file ED 14/24, 7 Aug. 1890. See also *Medical Inspection and Feeding of School Children Committee*, PP 1905; Mildred Emily Bulkley, *The Feeding of School Children*, 1914, pp. 16–19.
105. Feeding of schoolchildren was part of SDF policy. Amie Hicks' platform in the 1885 School Board election called for at least one gratuitous meal a day in every Board school: *Justice*, 3 Oct. 1885, p. 1. This may have brought their School Board candidates extra support in 1888 (when Annie Besant topped the Tower Hamlets poll) and 1891 (when two candidates each polled over 10,000 votes): cf. Paul Thompson, *Socialists, Liberals and Labour: the Struggle for London 1885–1914*, 1967, pp. 99, 118–19.

106. Thomas Gautrey, *Lux Mihi Laus*, 1937, p. 92–3. The majority Progressives were split: in a ‘violent discussion’ Lyulph Stanley opposed the proposal.
107. J. S. Hurt shows this clearly: *Elementary Schooling and the Working Classes, 1860–1918*, 1979, pp. 122–4.
108. See for example E. Gwynn (President of the Incorporated Society of Medical Officers of Health) ‘The Medical Officer of Health as a Public Teacher’, *Public Health*, Nov. 1898, p. 79; *Interdepartmental Committee on Physical Deterioration, Report*, PP 1904 xxxii (2175), p. 15 para 6; Thomas James Macnamara, ‘In Corpore Sano’, *Contemporary Review* 87, Feb. 1905, p. 238; *Reports on Children under Five in Public Elementary Schools by the Women Inspectors of the Board of Education*, PP 1906 xc (2726), pp. 9–10; John Gorst, *The Children of the Nation: How their Health and Vigour should be Promoted by the State*, 1906, chap. 5; Mildred Emily Bulkley, *The Feeding of School Children*, 1914, pp. 27–35. For more recent discussion: Richard Selleck, *The New Education: the English Background, 1870–1914*, 1968, pp. 161–5; Anna Davin, ‘Imperialism and Motherhood’, *History Workshop Journal* 5, 1978, pp. 9–18; John S. Hurt, *Elementary Schooling and the Working Classes, 1860–1918*, 1979, pp. 104–5.
109. Booth, *Poverty* 3, p. 207 (Mary Tabor, ‘Education’, 1891).
110. SBL *Subcommittee... Meals, Minutes*, 1889, p. 48; SBL *General Purposes Committee, Minutes*, 1898–9, (‘Report on Underfed Children Attending School’); *Interdepartmental Committee on Physical Deterioration*, PP 1904 xxxii (2186), evidence Dr Eicholz, pp. 25–6.
111. See for example *Reports on Children under Five*, PP 1906 xc (2726), pp. 10–12 (Miss Munday’s report).
112. Reeves (*Pound a Week*, p. 60), as usual, is an exception. Note also p. 89, where ‘the little Ps’ swallow a hasty dinner standing up, but ‘never omit to close their eyes and say “Thank Gord for me good dinner—good afternoon, Mrs R.” before they go’.
113. White, *Rothschild Buildings*, pp. 90–1.
114. Alice L., ms. memoir, p. 8.
115. Bibby, *Pudding Lady*, p. 46.
116. Robert H. Sherard, *The Child Slaves of Britain*, 1905, p. 14. See also Booth, *Poverty* 3, p. 210 (Tabor): children had ‘no regular mealtimes. When they are hungry, the mother puts into their hands a “butty” ... and sends them off to consume it.’
117. Millicent Mackenzie, ‘The Social and Educational Aspects of the School Meal’, in Charles E. Hecht (ed.), *Rearing an Imperial Race*, 1913, p. 17; W. A. Nicholls, ‘How Far is the Feeding of Public Elementary Schoolchildren an Educational Function?’, in Charles E. Hecht (ed.), *Rearing an Imperial Race*, 1913, pp. 80–1 and ensuing discussion. Cf. Thomas Morgan’s lessons in table manners at an 1890s Walworth school: Thompson, *Childhoods*, p. 27.
118. Reeves, *Pound a Week*, pp. 98–9.

119. National Food Economy League, *How to Save Money*, pp. 13–14.
120. Unnamed headmistress quoted in Margaret Frere, *Children's Care Committees*, 1909, p. 25.
121. *Toynbee Record*, Feb. 1895, p. 64. Children of hardworking respectable widows (Edwin Pugh, *City of the World*, 1912, p. 200) were underfed but not obviously so, with 'nothing picturesquely squalid about their appearance, nothing effectively theatrical about their misery'.
122. *Medical Officer of Health, London, Report 1905*, App. 2, p. 20–1. 'They have no near park or fields; their back gardens or house rooms are small, so they do not compare favourably (save in cleanliness) with children in poorer quarters who play freely in the open air.'
123. They made up 5.2 per cent of the 10,200 children seen in elementary schools of 'upper social class' between 1888 and 1891, and only 3.9 per cent of the 25,000 examined in poorer schools: Francis Warner, 'Results of an Inquiry as to the Physical and Mental Condition of 50,000 Children seen in 106 Schools', *Journal of the Royal Statistical Society* 56, March 1893. Fifty years before, Mary Carpenter noted of the ragamuffins at her Ragged School that 'all appeared better fed than the children of the decent poor': Ruby J. Saywell, *Mary Carpenter of Bristol*, Bristol, 1964, p. 4.
124. Miss N. (born Shadwell, 1895) Essex 331, transcript pp. 24, 35, 42.
125. Family tradition reported (March 1983) by Christine Holloway, Mrs Muckell's niece. Mrs Muckell's mother and her sister-in-law were the women.
126. Letters to the *Daily Mirror*, 17 Nov. 1978 (elderly correspondents writing from Tottenham, Camberwell, and Lancashire); see also 7 Nov.: 'a kick at the pantry door', 'bread and pullet' (you were given a piece of bread and told to pull it), 'a jump at t'door and a bite at t'latch'. Similar sayings were used by nannies to stave off inquiries from their importunate charges, whose hunger, however, was more likely to be satisfied: Lewis Casson and Joyce Grenfell, *Nanny Says*, [n.d.], p. [7].
127. Danny P. (born Shoreditch, 1905), conversation Whitechapel, 9 June 1975.
128. *Toby*, 17 July 1886, p. 6.
129. Desmond Young, 'Charitable and Benevolent London', in G. R. Sims (ed.), *Living London*, 1902–3, vol. 3, p. 204, and photograph p. 203.
130. British Library Prints and Photographs, Malby 3492–3; from Poplar series.
131. James Greenwood, *In Strange Company: being the experiences of a Roving Correspondent*, 1873, in chapter entitled 'A Mission among City Savages'!
132. Elsie M. (born Hoxton, 1903), ms. memoir, p. 6.
133. Southgate (born Hackney, 1890), *That's the Way*, p. 41–2.
134. Margaret Cohen, and Marion and Hymie Fagan (eds), *Childhood Memories: recorded by some Socialist men and women in their later years*, 1984, p. 26. Cf. White, *Rothschild Buildings*, p. 160. 'Soup Kitchen for the Jewish Poor' is still there on a building in Brune Street.
135. Charles Morley, *Studies in Board Schools*, 1897, p. 42.

136. Marie W. (born Hoxton, 1904), ms. memoir, pp. 19–24.
137. Waltham Forest Oral History Workshop display, ‘Exploring Living Memory’ exhibition, Festival Hall, London, 1986: photograph (of line of children with jugs, and landlady giving them loaves) dated ‘c. 1904’ and accompanying extract from unidentified transcript.
138. Dick O., Hackney People’s Autobiography discussion, 1973. (It contained ‘half a leg of lamb, vegetables...tea, sugar and different stuffs—meat, mince pies and that...’) Cf. Southgate, *That’s the Way*, chap. 23, on Bottomley’s election largesse.
139. Six-year-old Angela Rodaway got chocolate and an apple the first time, and a fancy cake and a custard tart the second, but was turned away with a smile when she tried again: Angela Rodaway, *A London Childhood*, (1960) 1985, pp. 24–5. Cf. Victor S. Pritchett, *A Cab at the Door*, 1968, p. 29; and Harding’s surprisingly friendly memories of Kingsland Road police from when he was very young: ‘they knew that you was hungry. And so they used to give you a slice of bread and jam’; his sister would come to find him and be warned by the inspector ‘tell your mother I’m not having him in here no more’: Samuel, *Underworld*, p. 36.
140. Samuel, *Underworld*, p. 27.
141. Frederick Willis, *London General*, 1953, p. 92.
142. Bessie C. (born Bermondsey, 1893), Essex 261, transcript p. 47.

Chapter 8

1. See <http://wortschatz.uni-leipzig.de/>. Accessed February 26, 2011. This database contains 5.2 million books and represents 4% of all books ever printed. For every year 6,000 randomly picked books are included. Only words or phrases which are contained in at least forty books are displayed in the graphs; most books are in English, which thus yields the best and most reliable results. The construction has some limits, but it shows general trends fairly well; for a better understanding one has to control how the respective word or phrase was used in the context of the book, but it offers interesting insights. For details on the construction and use of this database, see Michel et al. 2011. To follow this investigation, go to http://ngrams.googlelabs.com/graph?content=body+and+soul&year_start=1800&year_end=2000&corpus=0&smoothing=3.
2. Shapin 1998; Thoms 2007.
3. See Nutton 1993; Philipps 1973; Böhme and Böhme 1996.
4. Moleschott 1859, 540–43, 181, 196. See introduction to this volume.
5. See, among many others, Kamminga and Cunningham 1995; Carpenter 2003; Spiekermann 2000; Thoms 2005, 342–78.
6. Brillat-Savarin [1825] 1848, 217–19.

7. Frank 1804, 600; Kleinspehn 1987, 253–368.
8. Elias 1983; Brillat-Savarin [1825] 1848, 219.
9. Hieronymus and Epistulae 52, 11.4, and 58.2.
10. Gerlitz et al. 1983.
11. Kim 2006.
12. Vogelstein 2010.
13. Merta 2003, 93–217.
14. See as a randomly picked example from a rich body of publications: Buchinger 2005.
15. For the context of this increased interest, see the preface of Joan Brumberg's path-breaking book: Brumberg 1988; for the history of anorexia, see especially Vandereycken et al. 1990; Diezemann 2000.
16. There is a vast amount of literature on life reform, see Nissenbaum 1980; Barlösius 1997; Hau 2003; Zweiniger-Bargielowska 2010.
17. See Baumgartner 1992; the rich homepage of the colony's archive under: <http://www.eden-eg.de/archiv.htm>.
18. Landmann 1918.
19. The literature on vegetarianism is enormous. Among others see: Fiddes 1992; Gregory 2007; Iacobbo 2004; Wirz 1999; Teuteberg 1994b.
20. See chapter 1.
21. Thoms 2010b; Sorcinelli 2001, 82.
22. Thoms 2010a.
23. Wedemeyer-Kolwe 2004, 296.
24. Merta 2003, 218–78, 514–35; Meriwether 1887, 120.
25. Thoms 2005, 736–58.
26. Baer 1871, 136 f.
27. Meriwether 1892, 218.
28. Meriwether 1892, 223; Corvin 1884.
29. Healy 1984; Healy 1985.
30. Feuerbach, Ludwig. 1982. "Wider den Dualismus von Leib und Seele, Fleisch und Geist." In *Gesammelte Werke*, 181. Vol. 10. Berlin, cited in Lemke 2007, 378.
31. Treitel 2008; Lorand 1911.
32. *International university lectures*, vol. 7, 1909, 764.

Chapter 9

1. Ó'Grada 2009, 35.
2. Mennell [1985] 1996, 45.
3. Fogel 2004.
4. Belasco 2007; Simmons 2008.
5. Meriwether 1887, 252.

6. Curtin 1985, 173–75.
7. Ó’Grada 2009, chap 1.
8. Bonzon and Davies 1997, 305–41.
9. O’Grada 2009, 99.
10. Marx 2008, 704
11. Simmons 2008, 181.
12. Hobsbawm 1975, 351.
13. Zola 1971, 146. See Grignon 1986, 117–60.
14. Capatti and Montanari 2003, xvii.
15. Simmons 2008, 176–77.
16. Kiernan 1986.
17. Mintz 1985, 185.
18. Ariès and Duby 1990, 50–58.
19. Apple 1995a, 161–78.
20. Bruegel 2002b, 118–20.
21. Terrio 2000, 10.
22. Bruegel 2001.
23. Bruegel 2001, 106.
24. Nadau 2005.
25. Mitchell 1986, 452.
26. Cited in Maurrus 1974, 120.
27. Nützenadel 2008, 153–71.
28. Burnett 1999.
29. Appadurai 1981, 494.
30. Scholliers 2001, 3–22.
31. Wilk 2002, 70.
32. Nützenadel and Trentmann 2008a, 13.
33. Jackson and Ward 2008, 235–52.
34. Frederico 2005.
35. Pieterse 1982.
36. Guy 2010, 151.
37. Quoted in Walvin 1982, 69.
38. Deguid 2003, 405–41.
39. Boisard and Letablier-Zelter 1986, 3.
40. Camporesi 1994, 42.
41. Pitte 1987, 204.
42. Weber 1976.
43. Guy 2003.
44. Héraud 1986, 169.
45. Nadau 2005, 49–53.
46. Wilk 2008, 98.
47. Davies 1996, 288.
48. Nützenadel and Trentmann 2008b, 13.

Chapter 10

1. Wilk 2006.
2. Burton 2000.
3. Pilcher 2006, 66–67.
4. Pilcher 1998; Lind and Barham 2004.
5. Daviron and Ponte 2005, 2–11.
6. Curtin 1998.
7. Richardson 1982.
8. Mackie 1991, 130–70.
9. Liao 2006.
10. Clarence-Smith and Topik 2003.
11. Cascudo 1983.
12. Birmingham 1978; Dias 1981.
13. Clarence-Smith 1994.
14. Berry 1974; Sutton 1983; Austin 1987.
15. Adas 1974, Schendel 1987; Elson 2004.
16. Péhaut 1970; Bowman 1987.
17. Adas 1981.
18. Curtin 1984.
19. Woolf 1952; Brooks 1975; Lynn 1981.
20. Ade Ajayi 1998, 14–16.
21. Steinhart 1989.
22. McCann 1990.
23. Aregay 1988.
24. Feinstein 2005, 22–46.
25. Ade Ajayi 1998, 26–38.
26. Goody 1982.
27. Neill 2009.
28. Martin 2007, 141–75.
29. Moxham 2004, 156–84.
30. Reinders 2004
31. Bernhardt 1992; Li 2000.
32. Rosenbaum 1975; Li 1982.
33. Smith 1956.
34. Ashkenazi and Jacob 2000; Ishige 2001.
35. Cwiertka 2006, 56–86.
36. Cwiertka 2006, 88–100.
37. Cwiertka 2006, 111.
38. Achaya 1994.
39. Attwood 1987.
40. Brockway 2002, 24–9.
41. Collingham 2006, 93–98.
42. Collingham 2001; Banerji 2007.
43. Achaya 1998, 163–78.

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